SAMSUNG

RAC Technical Data Book

AR9500T RAC for Nordic (R32, 50Hz, HP)

Model : AR*****C***NEE (Indoor Unit)
AR*****C***XEE (Outdoor Unit)

History

Version	Modification	Date	Remark
Ver.1.0	Released AR9500T RAC for Nordic	25. 06. 16	
Ver.2.0	Updated new line up	25. 09. 24	
Ver.2.1	Update	25. 11. 13	
Ver.2.2	Update	25. 11. 25	
Ver.2.3	Update	25. 12. 24	

Nomenclature

Model Name

AR	70	F	09	C	A	B	W	N	EE
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	Buyer

(1) Classification

AR	RAC

(2) Series

50	(Entry) Wind / Sourcing
60	(Standard) Wind Free
70	(Deluxe) Wind Free / PM2.5
80	(Premium) Wind Free / PM1.0
90	(Infinite) Wind Free / PM1.0 Temp&Humid Control

(3) Year

H	2026
F	2025
D	2024

(4) Capacity

x1000 Btu/h

(5) Product type

C	INVERTER, Heat Pump, R32
D	INVERTER, Cooling Only, R32

(6) AI Level

4	Vision / MOV / Set Bixby / Radar / Wi-Fi
3	MOV / Set Bixby / Radar / Wi-Fi
2	Set Bixby / MDS, CSI / Wi-Fi
A	MDS / Wi-Fi
1	Wi-Fi
0	-

(7) Version

A-Z, 1~9 (1 digit)

(8) Color & Design

W	White / Geo
B	Black / Airise
H	White / Airise
M	Mint / Bespoke
G	Grey / Bespoke

(9) Set

N	Indoor Unit
X	Outdoor Unit
/	Set

Line-up

Indoor Unit

Model Type	Design	Image	
Nordic WindFree™ Geo S2	WindFree™ GEO		
Nordic WindFree™ Comfort S2			
Nordic Airise Premium S2	AIRISE		
Nordic Airise S2			

Model Type	Design	Capacity (kBtu/h)	
		09	12
Nordic WindFree™ Geo S2	WindFree™ GEO	●	●
Nordic WindFree™ Comfort S2	WindFree™ GEO	●	●
Nordic Airise Premium S2	AIRISE	●	●
Nordic Airise S2			

Line-up

Outdoor Unit

Model Type	Capacity (kBtu/h)	
	09	12
Nordic WindFree™ Geo S2		
Nordic WindFree™ Comfort S2		
Nordic Airise Premium S2		
Nordic Airise S2		

Contents

1. Specification

Nordic WindFree™ Geo S2

Model Name		Indoor Unit			AR70F09CABWNEE	AR70F12CABWNEE
		Outdoor Unit			AR70F09CABWXEE	AR70F12CABWXEE
System	Mode			-	Heat Pump	Heat Pump
	Performance	Capacity (Min/Std/Max)	Cooling	kW	1.0 / 2.5 / 4.0	1.0 / 3.5 / 4.8
				Btu/h	3,412 / 8,530 / 13,649	3,412 / 11,942 / 16,378
			Heating	kW	0.7 / 3.2 / 6.8	0.7 / 4.0 / 7.3
				Btu/h	2,388 / 10,919 / 23,203	2,388 / 13,649 / 24,909
	Power	Power Input (Min/Std/Max)	Cooling	kW	0.18 / 0.535 / 1.07	0.18 / 0.86 / 1.45
			Heating	kW	0.15 / 0.675 / 2.16	0.15 / 0.94 / 2.28
		Current Input (Min/Std/Max)	Cooling	A	1.5 / 2.8 / 4.7	1.5 / 4.1 / 6.4
			Heating	A	1.3 / 3.2 / 9.5	1.3 / 4.4 / 10.0
	Efficiency	EER	Cooling	W/W	4.67	4.07
		COP	Heating	-	4.74	4.26
	Efficiency (EN14825)	Pdesign_C	Cooling	kW	2.5	3.5
		SEER		W/W	9.5 (A+++)	8.8 (A+++)
		Pdesign_H (Warmer/Average/Colder)	Heating	kW	- / 2.4 / 3.2	- / 2.4 / 3.2
		SCOP (Average / Colder)		W/W	5.1 / 4.0 (A+++ / A+)	5.1 / 4.0 (A+++ / A+)
	Piping Connections	Liquid Pipe		Type	Flare	Flare
				Φ, ㎜ (inch)	6.35 (1/4)	6.35 (1/4)
		Gas Pipe		Type	Flare	Flare
				Φ, ㎜ (inch)	9.52 (3/8)	9.52 (3/8)
		Heat Insulation		-	Both liquid and gas pipes	Both liquid and gas pipes
		Installation Limitation	Max. Length (Outdoor to Indoor)	m	20	20
			Max. Height (Between ID/OD)	m	10	10
	Wiring connections	Power Source Wire		㎟	1.5	1.5
		Communication	Min.	㎟	0.75	0.75
			Remark	-	F1,F2	F1,F2
	Refrigerant	Type		-	R32	R32
		Factory Charging		kg	0.965	0.965
				tCO_2e	0.65	0.65
Indoor Unit	Power Supply			Ø, #, V, Hz	1, 2, 220-240, 50	1, 2, 220-240, 50
	Heat Exchanger	Type		-	F&T	F&T
		Material	Fin	-	Al	Al
			Tube	-	Cu	Cu
		Fin Treatment		-	Blue Hydrophile	Blue Hydrophile
	Fan	Type		-	Cross Flow	Cross Flow
		Quantity		EA	1	1
		Air Flow Rate	Cooling (T/H/M/L)	m^3/min	11.1 / 10.1 / 8.6 / 7.1	12.1 / 10.6 / 9.1 / 7.1
				l/s	185 / 168 / 143 / 118	202 / 177 / 152 / 118
			Heating (T/H/M/L)	m^3/min	13.1 / 12.1 / 10.6 / 9.1	13.1 / 11.6 / 10.1 / 8.1
				l/s	218 / 202 / 177 / 152	218 / 193 / 168 / 135
	Fan Motor	Type		-	BLDC	BLDC
		Output		W x n	27 x 1	27 x 1
	Drain	Drain Pipe		Φ, ㎜	16.3, 550	16.3, 550
	Sound Level	Sound Pressure Level	H / Low	dB(A)	38 / 17	40 / 17
		SoundPowerLevel		dB(A)	56	58
	External Dimension	Net Weight		kg	10.4	10.4
		Shipping Weight		kg	12.2	12.2
		Net Dimensions (WxHxD)		㎜	889 x 299 x 215	889 x 299 x 215
		Shipping Dimensions (WxHxD)		㎜	950 x 290 x 375	950 x 290 x 375
	Casing	Material		-	HIPS	HIPS
	Control System	Infrared remote control		-	Included	Included
		Wired remote control		-	-	-
	Drain Pump	Drain Pump		-	-	-
		Max. lifting Height / Displacement		㎜ / Liter/h	-	-
	Additional Accessories	Easy Filter Plus		-	Removable / Washable	Removable / Washable
		Tri-Care Filter		-	●	●
		Motion Detect Sensor		-	●	●
		Wi-Fi		-	●	●

1. Specification

Nordic WindFree™ Geo S2

Model Name		Indoor Unit			AR70F09CABWNEE	AR70F12CABWNEE
		Outdoor Unit			AR70F09CABWXEE	AR70F12CABWXEE
Outdoor Unit	Power Supply			Ø, #, V, Hz	1, 2, 220-240, 50	1, 2, 220-240, 50
	Heat Exchanger	Type		-	F&T	F&T
		Material	Fin	-	Al	Al
			Tube	-	Cu	Cu
		Fin Treatment		-	Blue Hydrophile	Blue Hydrophile
	Compressor	Model Name			KTN130D42UFR	KTN130D42UFR
		Type		-	Twin Rotary	Twin Rotary
		Output		kW	4.09	4.09
		Oil	Type	-	POE	POE
			Initial charge	cc	350	350
	Fan	Type		-	Propeller	Propeller
		Discharge direction		-	Front	Front
		Quantity		EA	1	1
		Air Flow Rate		m^3/min	45	45
				l/s	750	750
	Fan Motor	Type		-	BLDC	BLDC
		Output		W x n	45 x 1	45 x 1
	Sound Level	Sound Pressure Level	Cooling	dB(A)	45	46
		SoundPowerLevel		dB(A)	59	62
	External Dimension	Net Weight		kg	31.9	31.9
		Shipping Weight		kg	33.8	33.8
		Net Dimensions (WxHxD)		mm	790 x 548 x 285	790 x 548 x 285
		Shipping Dimensions (WxHxD)		mm	913 x 622 x 371	913 x 622 x 371
	Casing	Material	Body	-	EGI Steel Plate / PP	EGI Steel Plate / PP
	Operating Temp. Range	Cooling		℃	-15 ~ 46	-15 ~ 46
		Heating		℃	-30 ~ 24	-30 ~ 24

NOTE

- Specifications may be subject to change without prior notice.

1) Nominal cooling capacities are based on;
   Indoor temperature: 27°C DB, 19°C WB
   Outdoor temperature: 35°C DB, 24°C WB, Equivalent refrigerant piping: 5m, Level differences: 0 m
2) Nominal heating capacities are based on;
   Indoor temperature: 20°C DB, 15°C WB
   Outdoor temperature: 7°C DB, 6°C WB, Equivalent refrigerant piping: 5m, Level differences: 0 m
3) Sound pressure was acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions.
4) These products contain R32 which is fluorinated greenhouse gas.

1. Specification

Nordic WindFree™ Comfort S2

Model Name		Indoor Unit			AR60F09C1CWNEE	AR60F12C1CWNEE
		Outdoor Unit			AR60F09C1CWXEE	AR60F12C1CWXEE
System	Mode			-	Heat Pump	Heat Pump
	Performance	Capacity (Min/Std/Max)	Cooling	kW	0.96 / 2.5 / 3.7	1.0 / 3.5 / 4.6
				Btu/h	3,276 / 8,530 / 12,625	3,412 / 11,942 / 15,696
			Heating	kW	0.7 / 3.2 / 6.7	0.7 / 4.0 / 7.2
				Btu/h	2,388 / 10,919 / 22,861	2,388 / 13,649 / 24,567
	Power	Power Input (Min/Std/Max)	Cooling	kW	0.17 / 0.57 / 0.96	0.18 / 0.91 / 1.4
			Heating	kW	0.15 / 0.76 / 2.2	0.15 / 1.07 / 2.4
		Current Input (Min/Std/Max)	Cooling	A	1.5 / 3 / 4.3	1.5 / 4.1 / 6.1
			Heating	A	1.3 / 3.4 / 10.0	1.3 / 4.7 / 10.5
	Efficiency	EER	Cooling	W/W	4.39	3.85
		COP	Heating	-	4.21	3.74
	Efficiency (EN14825)	Pdesign_C	Cooling	kW	2.5	3.5
		SEER		W/W	8.8 (A+++)	8.6 (A+++)
		Pdesign_H (Wamer/Average/Colder)	Heating	kW	- / 2.3 / 3.2	- / 2.4 / 3.2
		SCOP (Average / Colder)		W/W	4.8 / 3.8 (A++ / A)	4.8 / 3.8 (A++ / A)
	Piping Connections	Liquid Pipe		Type	Flare	Flare
				Φ, mm (inch)	6.35 (1/4)	6.35 (1/4)
		Gas Pipe		Type	Flare	Flare
				Φ, mm (inch)	9.52 (3/8)	9.52 (3/8)
		Heat Insulation		-	Both liquid and gas pipes	Both liquid and gas pipes
		Installation Limitation	Max. Length (Outdoor to indoor)	m	15	15
			Max. Height (Between ID/OD)	m	8	8
	Wiring connections	Power Source Wire		㎟	1.5	1.5
		Communication	Min.	㎟	0.75	0.75
			Remark	-	F1,F2	F1,F2
	Refrigerant	Type		-	R32	R32
		Factory Charging		kg	0.95	0.95
				tCO_2e	0.64	0.64
Indoor Unit	Power Supply			Ø, #, V, Hz	1, 2, 220-240, 50	1, 2, 220-240, 50
	Heat Exchanger	Type		-	F&T	F&T
		Material	Fin	-	Al	Al
			Tube	-	Cu	Cu
		Fin Treatment		-	Blue Hydrophile	Blue Hydrophile
	Fan	Type		-	Cross Flow	Cross Flow
		Quantity		EA	1	1
		Air Flow Rate	Cooling (T/H/M/L)	m^3/min	9.5 / 9 / 8.5 / 7.4	10.5 / 10 / 9 / 7.9
				l/s	158 / 150 / 142 / 123	175 / 167 / 150 / 132
			Heating (T/H/M/L)	m^3/min	11.1 / 10.5 / 10 / 9	12.1 / 11.6 / 10.5 / 9.5
				l/s	185 / 175 / 167 / 150	202 / 193 / 175 / 158
	Fan Motor	Type		-	BLDC	BLDC
		Output		W x n	27 x 1	27 x 1
	Drain	Drain Pipe		Φ, mm	16.3, 550	16.3, 550
	Sound Level	Sound Pressure Level	H / Low	dB(A)	38 / 17	40 / 17
		SoundPowerLevel		dB(A)	56	58
	External Dimension	Net Weight		kg	9.8	9.8
		Shipping Weight		kg	11.5	11.5
		Net Dimensions (WxHxD)		mm	889 x 299 x 215	889 x 299 x 215
		Shipping Dimensions (WxHxD)		mm	950 x 290 x 375	950 x 290 x 375
	Casing	Material		-	HIPS	HIPS
	Control System	Infrared remote control		-	Included	Included
		Wired remote control		-	-	-
	Drain Pump	Drain Pump		-	-	-
		Max. lifting Height / Displacement		mm / Liter/h	-	-
	Additional Accessories	Easy Filter Plus		-	Removable / Washable	Removable / Washable
		Tri-Care Filter		-	-	-
		Motion Detect Sensor		-	-	-
		Wi-Fi		-	●	●

1. Specification

Nordic WindFree™ Comfort S2

Model Name		Indoor Unit			AR60F09C1CWNEE	AR60F12C1CWNEE
		Outdoor Unit			AR60F09C1CWXEE	AR60F12C1CWXEE
Outdoor Unit	Power Supply			Ø, #, V, Hz	1, 2, 220-240, 50	1, 2, 220-240, 50
	Heat Exchanger	Type		-	F&T	F&T
		Material	Fin	-	Al	Al
			Tube	-	Cu	Cu
		Fin Treatment		-	Blue Hydrophile	Blue Hydrophile
	Compressor	Model Name			KTN130D42UFR	KTN130D42UFR
		Type		-	Twin Rotary	Twin Rotary
		Output		kW	4.09	4.09
		Oil	Type	-	POE	POE
			Initial charge	cc	350	350
	Fan	Type		-	Propeller	Propeller
		Discharge direction		-	Front	Front
		Quantity		EA	1	1
		Air Flow Rate		m³/min	45	45
				l/s	750	750
	Fan Motor	Type		-	BLDC	BLDC
		Output		W x n	45 x 1	45 x 1
	Sound Level	Sound Pressure Level	Cooling	dB(A)	45	46
		SoundPowerLevel		dB(A)	59	62
	External Dimension	Net Weight		kg	31.9	31.9
		Shipping Weight		kg	33.8	33.8
		Net Dimensions (WxHxD)		mm	790 x 548 x 285	790 x 548 x 285
		Shipping Dimensions (WxHxD)		mm	913 x 622 x 371	913 x 622 x 371
	Casing	Material	Body	-	EGI Steel Plate / PP	EGI Steel Plate / PP
	Operating Temp. Range	Cooling		℃	-15 ~ 46	-15 ~ 46
		Heating		℃	-30 ~ 24	-30 ~ 24

NOTE

- Specifications may be subject to change without prior notice.

1) Nominal cooling capacities are based on;
   Indoor temperature: 27°C DB, 19°C WB
   Outdoor temperature: 35°C DB, 24°C WB, Equivalent refrigerant piping: 5m, Level differences: 0 m
2) Nominal heating capacities are based on;
   Indoor temperature: 20°C DB, 15°C WB
   Outdoor temperature: 7°C DB, 6°C WB, Equivalent refrigerant piping: 5m, Level differences: 0 m
3) Sound pressure was acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions.
4) These products contain R32 which is fluorinated greenhouse gas.

1. Specification

Nordic Airise Premium S2

Model Name		Indoor Unit			AR50H09C1BHNEE	AR50H12C1BHNEE
		Outdoor Unit			AR50H09C1BHXEE	AR50H12C1BHXEE
System	Mode			-	Heat Pump	Heat Pump
	Performance	Capacity (Min/Std/Max)	Cooling	kW	1.0 / 2.5 / 4.0	1.0 / 3.5 / 4.8
				Btu/h	3,412 / 8,530 / 13,649	3,412 / 11,942 / 16,378
			Heating	kW	0.7 / 3.2 / 6.8	0.7 / 4.0 / 7.3
				Btu/h	2,388 / 10,919 / 23,203	2,388 / 13,649 / 24,909
	Power	Power Input (Min/Std/Max)	Cooling	kW	0.18 / 0.535 / 1.07	0.18 / 0.86 / 1.45
			Heating	kW	0.15 / 0.675 / 2.16	0.15 / 0.94 / 2.28
		Current Input (Min/Std/Max)	Cooling	A	1.5 / 2.8 / 4.7	1.5 / 4.1 / 6.4
			Heating	A	1.3 / 3.2 / 9.5	1.3 / 4.4 / 10.0
	Efficiency	EER	Cooling	W/W	4.67	4.07
		COP	Heating	-	4.74	4.26
	Efficiency (EN14825)	Pdesign_C	Cooling	kW	2.5	3.5
		SEER		W/W	9.5 (A+++)	8.8 (A+++)
		Pdesign_H (Warmer/Average/Colder)	Heating	kW	- / 2.4 / 3.2	- / 2.4 / 3.2
		SCOP (Average / Colder)		W/W	5.1 / 4.0 (A+++ / A+)	5.1 / 4.0 (A+++ / A+)
	Piping Connections	Liquid Pipe		Type	Flare	Flare
				Φ, ㎜ (inch)	6.35 (1/4)	6.35 (1/4)
		Gas Pipe		Type	Flare	Flare
				Φ, ㎜ (inch)	9.52 (3/8)	9.52 (3/8)
		Heat Insulation		-	Both liquid and gas pipes	Both liquid and gas pipes
		Installation Limitation	Max. Length (Outdoor to Indoor)	m	20	20
			Max. Height (Between ID/OD)	m	10	10
	Wiring connections	Power Source Wire		㎟	1.5	1.5
		Communication	Min.	㎟	0.75	0.75
			Remark	-	F1,F2	F1,F2
	Refrigerant	Type		-	R32	R32
		Factory Charging		kg	0.965	0.965
				tCO_2e	0.65	0.65
Indoor Unit	Power Supply			Ø, #, V, Hz	1, 2, 220-240, 50	1, 2, 220-240, 50
	Heat Exchanger	Type		-	F&T	F&T
		Material	Fin	-	Al	Al
			Tube	-	Cu	Cu
		Fin Treatment		-	Blue Hydrophile	Blue Hydrophile
	Fan	Type		-	Cross Flow	Cross Flow
		Quantity		EA	1	1
		Air Flow Rate	Cooling (T/H/M/L)	m^3/min	11.1 / 10.1 / 8.6 / 7.1	12.1 / 10.6 / 9.1 / 7.1
				l/s	185 / 168 / 143 / 118	202 / 177 / 152 / 118
			Heating (T/H/M/L)	m^3/min	13.1 / 12.1 / 10.6 / 9.1	13.1 / 11.6 / 10.1 / 8.1
				l/s	218 / 202 / 177 / 152	218 / 193 / 168 / 135
	Fan Motor	Type		-	BLDC	BLDC
		Output		W x n	27 x 1	27 x 1
	Drain	Drain Pipe		Φ, ㎜	16.3, 550	16.3, 550
	Sound Level	Sound Pressure Level	H / Low	dB(A)	38 / 17	40 / 17
		SoundPowerLevel		dB(A)	56	58
	External Dimension	Net Weight		kg	10.4	10.4
		Shipping Weight		kg	12.2	12.2
		Net Dimensions (WxHxD)		㎜	889 x 299 x 215	889 x 299 x 215
		Shipping Dimensions (WxHxD)		㎜	950 x 290 x 375	950 x 290 x 375
	Casing	Material		-	HIPS	HIPS
	Control System	Infrared remote control		-	Included	Included
		Wired remote control		-	-	-
	Drain Pump	Drain Pump		-	-	-
		Max. lifting Height / Displacement		㎜ / Liter/h	-	-
	Additional Accessories	Easy Filter Plus		-	Removable / Washable	Removable / Washable
		Tri-Care Filter		-	●	●
		Motion Detect Sensor		-	●	●
		Wi-Fi		-	●	●

1. Specification

Nordic Airise Premium S2

Model Name		Indoor Unit			AR50H09C1BHNEE	AR50H12C1BHNEE
		Outdoor Unit			AR50H09C1BHXEE	AR50H12C1BHXEE
Outdoor Unit	Power Supply			Ø, #, V, Hz	1, 2, 220-240, 50	1, 2, 220-240, 50
	Heat Exchanger	Type		-	F&T	F&T
		Material	Fin	-	Al	Al
			Tube	-	Cu	Cu
		Fin Treatment		-	Blue Hydrophile	Blue Hydrophile
	Compressor	Model Name			KTN130D42UFR	KTN130D42UFR
		Type		-	Twin Rotary	Twin Rotary
		Output		kW	4.09	4.09
		Oil	Type	-	POE	POE
			Initial charge	cc	350	350
	Fan	Type		-	Propeller	Propeller
		Discharge direction		-	Front	Front
		Quantity		EA	1	1
		Air Flow Rate		m^3/min	45	45
				l/s	750	750
	Fan Motor	Type		-	BLDC	BLDC
		Output		W x n	45 x 1	45 x 1
	Sound Level	Sound Pressure Level	Cooling	dB(A)	45	46
		SoundPowerLevel		dB(A)	59	62
	External Dimension	Net Weight		kg	31.9	31.9
		Shipping Weight		kg	33.8	33.8
		Net Dimensions (WxHxD)		mm	790 x 548 x 285	790 x 548 x 285
		Shipping Dimensions (WxHxD)		mm	913 x 622 x 371	913 x 622 x 371
	Casing	Material	Body	-	EGI Steel Plate / PP	EGI Steel Plate / PP
	Operating Temp. Range	Cooling		℃	-15 ~ 46	-15 ~ 46
		Heating		℃	-30 ~ 24	-30 ~ 24

NOTE

- Specifications may be subject to change without prior notice.

1) Nominal cooling capacities are based on;
   Indoor temperature: 27°C DB, 19°C WB
   Outdoor temperature: 35°C DB, 24°C WB, Equivalent refrigerant piping: 5m, Level differences: 0 m
2) Nominal heating capacities are based on;
   Indoor temperature: 20°C DB, 15°C WB
   Outdoor temperature: 7°C DB, 6°C WB, Equivalent refrigerant piping: 5m, Level differences: 0 m
3) Sound pressure was acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions.
4) These products contain R32 which is fluorinated greenhouse gas.

1. Specification

Nordic Airise S2

Model Name		Indoor Unit			AR50F09C1CHNEE	AR50F12C1CHNEE
		Outdoor Unit			AR50F09C1CHXEE	AR50F12C1CHXEE
System	Mode			-	Heat Pump	Heat Pump
	Performance	Capacity (Min/Std/Max)	Cooling	kW	0.9 / 2.5 / 3.7	0.9 / 3.5 / 4.5
				Btu/h	3,071 / 8,530 / 12,625	3,071 / 11,942 / 15,355
			Heating	kW	0.7 / 3.2 / 6.3	0.75 / 4 / 6.6
				Btu/h	2,388 / 10,919 / 21,496	2,559 / 13,649 / 22,520
	Power	Power Input (Min/Std/Max)	Cooling	kW	0.17 / 0.56 / 0.97	0.17 / 0.92 / 1.4
			Heating	kW	0.14 / 0.81 / 2.16	0.14 / 1.13 / 2.2
		Current Input (Min/Std/Max)	Cooling	A	1.5 / 2.9 / 4.3	1.5 / 4.1 / 6.3
			Heating	A	1.2 / 3.7 / 9.6	1.2 / 5.1 / 9.7
	Efficiency	EER	Cooling	W/W	4.46	3.80
		COP	Heating	-	3.95	3.54
	Efficiency (EN14825)	Pdesign_C	Cooling	kW	2.5	3.5
		SEER		W/W	8.5 (A+++)	7.9 (A++)
		Pdesign_H (Wamer/Average/Colder)	Heating	kW	- / 2.3 / 3.1	- / 2.4 / 3.1
		SCOP (Average / Colder)		W/W	4.6 / 3.6 (A++ / A)	4.6 / 3.6 (A++ / A)
	Piping Connections	Liquid Pipe		Type	Flare	Flare
				Φ, ㎜ (inch)	6.35 (1/4)	6.35 (1/4)
		Gas Pipe		Type	Flare	Flare
				Φ, ㎜ (inch)	9.52 (3/8)	9.52 (3/8)
		Heat Insulation		-	Both liquid and gas pipes	Both liquid and gas pipes
		Installation Limitation	Max. Length (Outdoor to indoor)	m	20	20
			Max. Height (Between ID/OD)	m	10	10
	Wiring connections	Power Source Wire		㎟	1.5	1.5
		Communication	Min.	㎟	0.75	0.75
			Remark	-	F1,F2	F1,F2
	Refrigerant	Type		-	R32	R32
		Factory Charging		kg	0.93	0.93
				tCO_2e	0.63	0.63
Indoor Unit	Power Supply			Ø, #, V, Hz	1, 2, 220-240, 50	1, 2, 220-240, 50
	Heat Exchanger	Type		-	F&T	F&T
		Material	Fin	-	Al	Al
			Tube	-	Cu	Cu
		Fin Treatment		-	Blue Hydrophile	Blue Hydrophile
	Fan	Type		-	Cross Flow	Cross Flow
		Quantity		EA	1	1
		Air Flow Rate	Cooling (T/H/M/L)	m^3/min	10.5 / 10 / 9.5 / 8.5	10.9 / 10.5 / 9.5 / 8.5
				l/s	175 / 167 / 158 / 142	182 / 175 / 158 / 142
			Heating (T/H/M/L)	m^3/min	11.4 / 10.9 / 10.5 / 9.5	11.9 / 11.4 / 10.5 / 9.5
				l/s	190 / 182 / 175 / 158	198 / 190 / 175 / 158
	Fan Motor	Type		-	BLDC	BLDC
		Output		W x n	27 x 1	27 x 1
	Drain	Drain Pipe		Φ, ㎜	16.3, 550	16.3, 550
	Sound Level	Sound Pressure Level	H / Low	dB(A)	38 / 19	40 / 19
		SoundPowerLevel		dB(A)	56	58
	External Dimension	Net Weight		kg	9.1	9.1
		Shipping Weight		kg	10.8	10.8
		Net Dimensions (WxHxD)		㎜	820 x 299 x 215	820 x 299 x 215
		Shipping Dimensions (WxHxD)		㎜	880 x 290 x 375	880 x 290 x 375
	Casing	Material		-	HIPS	HIPS
	Control System	Infrared remote control		-	Included	Included
		Wired remote control		-	-	-
	Drain Pump	Drain Pump		-	-	-
		Max. lifting Height / Displacement		㎜ / Liter/h	-	-
	Additional Accessories	Easy Filter Plus		-	Removable / Washable	Removable / Washable
		Tri-Care Filter		-	-	-
		Motion Detect Sensor		-	-	-
		Wi-Fi		-	●	●

1. Specification

Nordic Airise S2

Model Name		Indoor Unit			AR50F09C1CHNEE	AR50F12C1CHNEE
		Outdoor Unit			AR50F09C1CHXEE	AR50F12C1CHXEE
Outdoor Unit	Power Supply			Ø, #, V, Hz	1, 2, 220-240, 50	1, 2, 220-240, 50
	Heat Exchanger	Type		-	F&T	F&T
		Material	Fin	-	Al	Al
			Tube	-	Cu	Cu
		Fin Treatment		-	Blue Hydrophile	Blue Hydrophile
	Compressor	Model Name			KTN130D42UFR	KTN130D42UFR
		Type		-	Twin Rotary	Twin Rotary
		Output		kW	4.09	4.09
		Oil	Type	-	POE	POE
			Initial charge	cc	350	350
	Fan	Type		-	Propeller	Propeller
		Discharge direction		-	Front	Front
		Quantity		EA	1	1
		Air Flow Rate		m³/min	45	45
				l/s	750	750
	Fan Motor	Type		-	BLDC	BLDC
		Output		W x n	45 x 1	45 x 1
	Sound Level	Sound Pressure Level	Cooling	dB(A)	46	46
		SoundPowerLevel		dB(A)	59	62
	External Dimension	Net Weight		kg	31.9	31.9
		Shipping Weight		kg	33.8	33.8
		Net Dimensions (WxHxD)		mm	790 x 548 x 285	790 x 548 x 285
		Shipping Dimensions (WxHxD)		mm	913 x 622 x 371	913 x 622 x 371
	Casing	Material	Body	-	EGI Steel Plate / PP	EGI Steel Plate / PP
	Operating Temp. Range	Cooling		℃	-15 ~ 46	-15 ~ 46
		Heating		℃	-30 ~ 24	-30 ~ 24

NOTE

- Specifications may be subject to change without prior notice.

1) Nominal cooling capacities are based on;
   Indoor temperature: 27°C DB, 19°C WB
   Outdoor temperature: 35°C DB, 24°C WB, Equivalent refrigerant piping: 5m, Level differences: 0 m
2) Nominal heating capacities are based on;
   Indoor temperature: 20°C DB, 15°C WB
   Outdoor temperature: 7°C DB, 6°C WB, Equivalent refrigerant piping: 5m, Level differences: 0 m
3) Sound pressure was acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions.
4) These products contain R32 which is fluorinated greenhouse gas.

2. Capacity Table

Nordic WindFree™ Geo S2

AR70F09CABWNEE + AR70F09CABWXEE

Cooling

TC : Total Capacity, SHC : Sensible Heat Capacity, PI : Power Input

Outdoor Temp. (°C, DB)	20 / 14			22 / 16			25 / 18			27 / 19			28 / 20			30 / 22			32 / 24		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-15	2.71	2.25	0.61	2.82	2.35	0.71	3.03	2.48	0.82	3.20	2.56	0.87	3.30	2.61	0.89	3.52	2.70	0.90	3.77	2.81	0.90
-5	2.85	2.38	0.54	2.98	2.49	0.63	3.22	2.63	0.73	3.41	2.73	0.77	3.52	2.78	0.79	3.76	2.88	0.79	4.04	3.01	0.77
0	2.94	2.46	0.51	3.07	2.57	0.60	3.33	2.72	0.70	3.53	2.82	0.74	3.64	2.87	0.75	3.89	2.98	0.75	4.17	3.11	0.73
10	3.12	2.60	0.47	3.26	2.72	0.56	3.53	2.88	0.66	3.74	2.98	0.69	3.85	3.04	0.70	4.11	3.15	0.70	4.41	3.29	0.67
20	3.23	2.69	0.47	3.37	2.81	0.57	3.64	2.97	0.67	3.85	3.07	0.71	3.97	3.13	0.71	4.23	3.24	0.71	4.52	3.38	0.69
25	3.23	2.69	0.50	3.37	2.81	0.60	3.63	2.97	0.70	3.84	3.07	0.74	3.96	3.12	0.75	4.22	3.24	0.75	4.51	3.37	0.73
32	3.16	2.63	0.56	3.29	2.74	0.67	3.54	2.89	0.78	3.75	2.99	0.83	3.86	3.04	0.84	4.11	3.16	0.85	4.40	3.28	0.83
35	3.09	2.57	0.61	3.22	2.68	0.71	3.46	2.83	0.83	2.50	2.00	0.54	3.78	2.98	0.89	4.02	3.09	0.90	4.30	3.21	0.88
40	2.93	2.44	0.69	3.05	2.54	0.81	3.28	2.68	0.94	3.47	2.78	0.99	3.58	2.83	1.01	3.82	2.93	1.02	4.09	3.05	1.01
43	2.79	2.33	0.76	2.91	2.43	0.88	3.13	2.57	1.01	3.32	2.66	1.07	3.42	2.70	1.09	3.65	2.81	1.11	3.92	2.92	1.09
46	2.63	2.19	0.83	2.74	2.29	0.96	2.95	2.42	1.10	3.13	2.51	1.16	3.23	2.56	1.18	3.46	2.65	1.20	3.72	2.77	1.19

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB)											
	16		18		20		21		22		24	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-30	2.55	1.26	2.20	1.20	2.04	1.24	2.04	1.29	2.09	1.37	2.32	1.60
-25	3.79	1.46	2.80	1.42	2.66	1.46	2.64	1.51	2.67	1.58	2.82	1.81
-20	3.65	1.69	3.41	1.65	3.28	1.69	3.26	1.75	3.25	1.82	3.32	2.03
-15	3.98	1.68	3.80	1.65	3.69	1.70	3.65	1.75	3.63	1.82	3.62	2.03
-10	4.30	1.67	4.19	1.66	4.10	1.71	4.05	1.76	4.01	1.83	3.93	2.03
-5	4.48	1.55	4.44	1.55	4.37	1.60	4.32	1.65	4.26	1.72	4.10	1.91
0	4.64	1.41	4.67	1.42	4.62	1.48	4.57	1.53	4.49	1.59	4.27	1.77
2	4.68	1.35	4.74	1.36	4.71	1.42	4.65	1.47	4.57	1.53	4.32	1.71
5	4.74	1.25	4.84	1.27	4.82	1.33	4.76	1.38	4.67	1.44	4.38	1.61
7	4.76	1.19	4.90	1.21	3.20	0.68	4.83	1.32	4.74	1.38	4.42	1.55
10	4.80	1.11	4.98	1.13	4.99	1.20	4.93	1.25	4.83	1.31	4.48	1.47
15	4.85	1.00	5.11	1.04	5.16	1.10	5.10	1.15	4.98	1.21	4.57	1.36
20	4.90	0.96	5.25	1.00	5.34	1.07	5.28	1.12	5.15	1.17	4.69	1.31
24	4.96	0.99	5.38	1.04	5.50	1.11	5.44	1.15	5.31	1.21	4.80	1.34

NOTE

- The performance table shows the average value of each conditions.
- Measurement under 5m condition of connection pipe.

2. Capacity Table

Nordic WindFree™ Geo S2

AR70F12CABWNEE + AR70F12CABWXEE

Cooling

TC : Total Capacity, SHC : Sensible Heat Capacity, PI : Power Input

Outdoor Temp. (°C, DB)	20 / 14			22 / 16			25 / 18			27 / 19			28 / 20			30 / 22			32 / 24		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-15	3.15	2.61	0.71	3.26	2.71	0.81	3.50	2.86	0.94	3.70	2.96	0.99	3.82	3.02	1.01	4.07	3.13	1.03	4.35	3.25	1.02
-5	3.13	2.62	0.61	3.26	2.73	0.72	3.54	2.90	0.83	3.77	3.02	0.88	3.90	3.08	0.89	4.18	3.20	0.90	4.49	3.34	0.88
0	3.23	2.71	0.59	3.38	2.82	0.69	3.67	3.00	0.81	3.91	3.13	0.85	4.04	3.19	0.86	4.33	3.32	0.87	4.65	3.46	0.84
10	3.55	2.96	0.58	3.70	3.09	0.69	4.01	3.28	0.80	4.26	3.41	0.85	4.40	3.47	0.86	4.71	3.61	0.86	5.04	3.76	0.83
20	3.85	3.20	0.63	4.00	3.33	0.75	4.32	3.52	0.88	4.58	3.65	0.93	4.72	3.72	0.95	5.03	3.86	0.95	5.37	4.01	0.91
25	3.93	3.27	0.69	4.09	3.40	0.82	4.40	3.59	0.96	4.66	3.72	1.01	4.80	3.79	1.03	5.11	3.93	1.03	5.45	4.08	1.00
32	3.92	3.26	0.80	4.07	3.38	0.95	4.38	3.57	1.10	4.63	3.70	1.17	4.77	3.76	1.18	5.08	3.90	1.19	5.41	4.05	1.16
35	3.86	3.20	0.86	4.00	3.33	1.01	4.30	3.51	1.18	3.50	2.80	0.89	4.69	3.70	1.27	4.99	3.84	1.28	5.33	3.98	1.25
40	3.65	3.03	0.99	3.79	3.15	1.15	4.07	3.33	1.33	4.32	3.45	1.41	4.45	3.52	1.43	4.75	3.65	1.45	5.08	3.79	1.43
43	3.45	2.88	1.07	3.59	2.99	1.24	3.87	3.17	1.43	4.10	3.29	1.52	4.24	3.35	1.54	4.53	3.48	1.57	4.85	3.62	1.55
46	3.20	2.67	1.17	3.33	2.79	1.35	3.60	2.96	1.55	3.83	3.07	1.64	3.96	3.13	1.67	4.25	3.26	1.70	4.56	3.39	1.68

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB)											
	16		18		20		21		22		24	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-30	2.65	1.29	2.28	1.31	2.13	1.34	2.13	1.34	2.18	1.35	2.42	1.38
-25	3.31	1.51	2.99	1.53	2.85	1.57	2.84	1.57	2.86	1.58	3.01	1.61
-20	3.97	1.73	3.71	1.76	3.57	1.80	3.55	1.81	3.54	1.82	3.61	1.85
-15	4.23	1.87	4.05	1.91	3.93	1.95	3.90	1.96	3.88	1.97	3.87	2.00
-10	4.89	2.08	4.76	2.11	4.66	2.16	4.61	2.17	4.56	2.18	4.46	2.22
-5	5.16	2.08	5.10	2.12	5.02	2.16	4.96	2.17	4.90	2.19	4.72	2.23
0	5.42	2.08	5.44	2.12	5.38	2.17	5.32	2.18	5.23	2.20	4.98	2.24
2	5.48	2.00	5.53	2.04	5.48	2.09	5.42	2.10	5.33	2.11	5.05	2.16
5	5.54	1.88	5.63	1.92	5.61	1.96	5.54	1.97	5.44	1.99	5.13	2.03
7	5.56	1.80	5.69	1.84	4.00	0.94	5.61	1.89	5.50	1.90	5.16	1.94
10	5.56	1.68	5.74	1.72	5.75	1.75	5.68	1.76	5.57	1.78	5.19	1.81
15	5.49	1.48	5.75	1.51	5.80	1.55	5.74	1.56	5.61	1.57	5.17	1.60
20	5.32	1.29	5.68	1.51	5.77	1.34	5.70	1.56	5.57	1.36	5.08	1.60
24	5.12	1.13	5.55	1.15	5.68	1.17	5.62	1.18	5.48	1.19	4.95	1.21

NOTE

- The performance table shows the average value of each conditions.
- Measurement under 5m condition of connection pipe.

2. Capacity Table

Nordic WindFree™ Comfort S2

AR60F09C1CWNEE + AR60F09C1CWXEE

Cooling

TC : Total Capacity, SHC : Sensible Heat Capacity, PI : Power Input

Outdoor Temp. (°C, DB)	Indoor Temperature (°C, DB / WB)																				
	20 / 14			22 / 16			25 / 18			27 / 19			28 / 20			30 / 22			32 / 24		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-15	2.51	2.22	0.74	2.65	2.32	0.77	2.91	2.41	0.80	3.01	2.57	0.85	3.17	2.51	0.83	3.34	2.57	0.85	3.56	2.59	0.84
-10	2.77	2.45	0.69	2.93	2.56	0.72	3.22	2.67	0.74	3.33	2.84	0.79	3.51	2.78	0.77	3.70	2.85	0.79	3.94	2.86	0.78
0	2.89	2.56	0.66	3.05	2.67	0.69	3.35	2.78	0.71	3.47	2.96	0.76	3.65	2.89	0.73	3.85	2.97	0.75	4.10	2.98	0.75
10	2.91	2.53	0.64	3.08	2.64	0.67	3.37	2.74	0.70	3.51	2.91	0.74	3.66	2.84	0.72	3.86	2.90	0.74	4.09	2.90	0.74
20	3.09	2.66	0.57	3.27	2.77	0.60	3.58	2.87	0.62	3.73	3.05	0.65	3.88	2.96	0.64	4.08	3.03	0.65	4.31	3.02	0.66
25	3.08	2.63	0.66	3.26	2.75	0.68	3.57	2.85	0.70	3.72	3.03	0.73	3.88	2.94	0.72	4.08	3.01	0.73	4.32	3.01	0.74
30	3.01	2.56	0.79	3.19	2.67	0.80	3.50	2.77	0.82	3.65	2.94	0.84	3.81	2.87	0.84	4.02	2.94	0.86	4.26	2.94	0.86
35	2.95	2.48	0.92	3.12	2.59	0.93	3.44	2.69	0.95	2.50	2.00	0.57	3.75	2.79	0.97	3.95	2.86	0.98	4.20	2.87	0.99
40	2.76	2.33	1.01	2.93	2.43	1.02	3.22	2.53	1.04	3.35	2.68	1.06	3.51	2.62	1.06	3.71	2.68	1.08	3.94	2.69	1.09
43	2.65	2.23	1.06	2.81	2.33	1.08	3.09	2.42	1.10	3.22	2.57	1.11	3.37	2.52	1.12	3.56	2.58	1.13	3.78	2.59	1.15
46	2.54	2.14	1.12	2.70	2.24	1.13	2.96	2.32	1.16	3.08	2.47	1.17	3.23	2.41	1.18	3.41	2.47	1.19	3.62	2.48	1.21

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB)											
	16		18		20		21		22		24	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-30	1.96	1.16	1.92	1.18	1.88	1.21	1.88	1.21	1.87	1.22	1.83	1.24
-25	2.39	1.37	2.35	1.39	2.29	1.42	2.29	1.43	2.28	1.44	2.23	1.46
-20	2.94	1.59	2.89	1.62	2.83	1.66	2.82	1.66	2.81	1.67	2.75	1.70
-15	3.53	1.80	3.47	1.83	3.39	1.87	3.38	1.88	3.37	1.89	3.30	1.92
-10	4.09	1.99	4.01	2.03	3.93	2.07	3.92	2.08	3.90	2.09	3.82	2.13
-5	4.63	2.14	4.55	2.18	4.45	2.23	4.44	2.24	4.42	2.25	4.33	2.30
0	5.18	2.29	5.09	2.34	4.98	2.39	4.96	2.40	4.93	2.42	4.83	2.47
2	4.92	2.00	4.83	2.04	4.73	2.08	4.71	2.10	4.68	2.11	4.59	2.15
5	4.52	1.56	4.44	1.59	4.35	1.63	4.33	1.64	4.31	1.65	4.22	1.68
7	4.26	1.27	4.18	1.30	3.20	0.76	4.08	1.33	4.06	1.34	3.97	1.37
10	4.38	1.22	4.30	1.24	4.21	1.27	4.19	1.28	4.17	1.29	4.08	1.31
15	4.57	1.15	4.49	1.18	4.39	1.20	4.37	1.21	4.35	1.22	4.26	1.24
20	4.73	1.18	4.49	1.18	4.54	1.23	4.37	1.21	4.50	1.25	4.26	1.24
24	4.85	1.20	4.76	1.23	4.66	1.25	4.64	1.26	4.62	1.27	4.52	1.29

NOTE

- The performance table shows the average value of each conditions.
- Measurement under 7.5m condition of connection pipe.

2. Capacity Table

Nordic WindFree™ Comfort S2

AR60F12C1CWNEE + AR60F12C1CWXEE

Cooling

TC : Total Capacity, SHC : Sensible Heat Capacity, PI : Power Input

Outdoor Temp. (°C, DB)	Indoor Temperature (°C, DB / WB)																				
	20 / 14			22 / 16			25 / 18			27 / 19			28 / 20			30 / 22			32 / 24		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-15	2.86	2.34	0.87	3.02	2.44	0.90	3.31	2.54	0.94	3.43	2.70	1.00	3.61	2.64	0.97	3.81	2.71	0.99	4.05	2.72	0.98
-10	2.88	2.36	0.86	3.04	2.46	0.89	3.34	2.57	0.93	3.46	2.73	0.99	3.64	2.67	0.96	3.84	2.73	0.98	4.09	2.75	0.97
0	3.32	2.72	0.71	3.51	2.84	0.75	3.86	2.96	0.77	3.99	3.15	0.82	4.20	3.08	0.80	4.43	3.15	0.81	4.71	3.17	0.81
10	3.22	2.59	0.75	3.40	2.70	0.78	3.72	2.80	0.80	3.87	2.98	0.85	4.05	2.90	0.83	4.26	2.97	0.85	4.51	2.97	0.85
20	3.37	2.68	0.67	3.57	2.79	0.70	3.90	2.89	0.73	4.06	3.08	0.77	4.23	2.99	0.75	4.45	3.05	0.77	4.70	3.04	0.78
25	3.49	2.76	0.84	3.69	2.88	0.86	4.04	2.98	0.89	4.21	3.17	0.92	4.39	3.08	0.91	4.62	3.15	0.93	4.89	3.15	0.94
30	3.57	2.80	1.08	3.78	2.92	1.10	4.15	3.03	1.12	4.32	3.22	1.15	4.51	3.14	1.15	4.76	3.21	1.16	5.05	3.22	1.18
35	3.65	2.84	1.31	3.87	2.97	1.33	4.25	3.08	1.36	3.50	2.80	0.91	4.64	3.20	1.38	4.89	3.28	1.40	5.20	3.29	1.41
40	3.38	2.63	1.40	3.58	2.75	1.42	3.94	2.86	1.44	4.10	3.03	1.46	4.30	2.97	1.47	4.53	3.04	1.49	4.82	3.05	1.51
43	3.22	2.51	1.45	3.41	2.62	1.47	3.75	2.72	1.50	3.91	2.89	1.52	4.09	2.82	1.52	4.32	2.89	1.54	4.59	2.90	1.56
46	3.06	2.38	1.50	3.24	2.49	1.52	3.57	2.59	1.55	3.71	2.75	1.57	3.89	2.68	1.58	4.10	2.75	1.60	4.36	2.76	1.62

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB)											
	16		18		20		21		22		24	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-30	2.00	1.21	1.96	1.23	1.92	1.26	1.91	1.26	1.91	1.27	1.87	1.29
-25	2.60	1.49	2.56	1.51	2.50	1.55	2.50	1.55	2.49	1.56	2.44	1.59
-20	3.33	1.81	3.27	1.84	3.20	1.88	3.19	1.89	3.18	1.90	3.11	1.93
-15	4.10	2.18	4.03	2.22	3.94	2.26	3.93	2.27	3.91	2.28	3.83	2.33
-10	4.72	2.45	4.64	2.49	4.54	2.55	4.53	2.55	4.51	2.57	4.42	2.62
-5	5.27	2.60	5.18	2.65	5.07	2.71	5.05	2.72	5.03	2.74	4.93	2.79
0	5.83	2.76	5.72	2.81	5.60	2.87	5.58	2.89	5.55	2.91	5.43	2.97
2	5.50	2.36	5.40	2.41	5.28	2.46	5.26	2.47	5.24	2.49	5.13	2.54
5	5.01	1.77	4.92	1.80	4.81	1.84	4.80	1.85	4.77	1.86	4.67	1.90
7	4.68	1.37	4.60	1.40	4.00	1.07	4.48	1.44	4.46	1.45	4.37	1.47
10	4.71	1.27	4.63	1.30	4.53	1.32	4.51	1.33	4.49	1.34	4.39	1.37
15	4.79	1.15	4.70	1.18	4.60	1.20	4.58	1.21	4.56	1.22	4.47	1.24
20	4.98	1.18	4.70	1.18	4.78	1.23	4.58	1.21	4.74	1.25	4.47	1.24
24	5.13	1.20	5.04	1.23	4.93	1.25	4.91	1.26	4.89	1.27	4.79	1.29

NOTE

- The performance table shows the average value of each conditions.
- Measurement under 7.5m condition of connection pipe.

2. Capacity Table

Nordic Airise Premium S2

AR50H09C1BHNEE + AR50H09C1BHXEE

Cooling

TC : Total Capacity, SHC : Sensible Heat Capacity, PI : Power Input

Outdoor Temp. (°C, DB)	20 / 14			22 / 16			25 / 18			27 / 19			28 / 20			30 / 22			32 / 24		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-15	2.71	2.25	0.61	2.82	2.35	0.71	3.03	2.48	0.82	3.20	2.56	0.87	3.30	2.61	0.89	3.52	2.70	0.90	3.77	2.81	0.90
-5	2.85	2.38	0.54	2.98	2.49	0.63	3.22	2.63	0.73	3.41	2.73	0.77	3.52	2.78	0.79	3.76	2.88	0.79	4.04	3.01	0.77
0	2.94	2.46	0.51	3.07	2.57	0.60	3.33	2.72	0.70	3.53	2.82	0.74	3.64	2.87	0.75	3.89	2.98	0.75	4.17	3.11	0.73
10	3.12	2.60	0.47	3.26	2.72	0.56	3.53	2.88	0.66	3.74	2.98	0.69	3.85	3.04	0.70	4.11	3.15	0.70	4.41	3.29	0.67
20	3.23	2.69	0.47	3.37	2.81	0.57	3.64	2.97	0.67	3.85	3.07	0.71	3.97	3.13	0.71	4.23	3.24	0.71	4.52	3.38	0.69
25	3.23	2.69	0.50	3.37	2.81	0.60	3.63	2.97	0.70	3.84	3.07	0.74	3.96	3.12	0.75	4.22	3.24	0.75	4.51	3.37	0.73
32	3.16	2.63	0.56	3.29	2.74	0.67	3.54	2.89	0.78	3.75	2.99	0.83	3.86	3.04	0.84	4.11	3.16	0.85	4.40	3.28	0.83
35	3.09	2.57	0.61	3.22	2.68	0.71	3.46	2.83	0.83	2.50	2.00	0.54	3.78	2.98	0.89	4.02	3.09	0.90	4.30	3.21	0.88
40	2.93	2.44	0.69	3.05	2.54	0.81	3.28	2.68	0.94	3.47	2.78	0.99	3.58	2.83	1.01	3.82	2.93	1.02	4.09	3.05	1.01
43	2.79	2.33	0.76	2.91	2.43	0.88	3.13	2.57	1.01	3.32	2.66	1.07	3.42	2.70	1.09	3.65	2.81	1.11	3.92	2.92	1.09
46	2.63	2.19	0.83	2.74	2.29	0.96	2.95	2.42	1.10	3.13	2.51	1.16	3.23	2.56	1.18	3.46	2.65	1.20	3.72	2.77	1.19

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB)											
	16		18		20		21		22		24	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-30	2.55	1.26	2.20	1.20	2.04	1.24	2.04	1.29	2.09	1.37	2.32	1.60
-25	3.79	1.46	2.80	1.42	2.66	1.46	2.64	1.51	2.67	1.58	2.82	1.81
-20	3.65	1.69	3.41	1.65	3.28	1.69	3.26	1.75	3.25	1.82	3.32	2.03
-15	3.98	1.68	3.80	1.65	3.69	1.70	3.65	1.75	3.63	1.82	3.62	2.03
-10	4.30	1.67	4.19	1.66	4.10	1.71	4.05	1.76	4.01	1.83	3.93	2.03
-5	4.48	1.55	4.44	1.55	4.37	1.60	4.32	1.65	4.26	1.72	4.10	1.91
0	4.64	1.41	4.67	1.42	4.62	1.48	4.57	1.53	4.49	1.59	4.27	1.77
2	4.68	1.35	4.74	1.36	4.71	1.42	4.65	1.47	4.57	1.53	4.32	1.71
5	4.74	1.25	4.84	1.27	4.82	1.33	4.76	1.38	4.67	1.44	4.38	1.61
7	4.76	1.19	4.90	1.21	3.20	0.68	4.83	1.32	4.74	1.38	4.42	1.55
10	4.80	1.11	4.98	1.13	4.99	1.20	4.93	1.25	4.83	1.31	4.48	1.47
15	4.85	1.00	5.11	1.04	5.16	1.10	5.10	1.15	4.98	1.21	4.57	1.36
20	4.90	0.96	5.25	1.00	5.34	1.07	5.28	1.12	5.15	1.17	4.69	1.31
24	4.96	0.99	5.38	1.04	5.50	1.11	5.44	1.15	5.31	1.21	4.80	1.34

NOTE

- The performance table shows the average value of each conditions.
- Measurement under 5m condition of connection pipe.

2. Capacity Table

Nordic Airise Premium S2

AR50H12C1BHNEE + AR50H12C1BHXEE

Cooling

TC : Total Capacity, SHC : Sensible Heat Capacity, PI : Power Input

Outdoor Temp. (°C, DB)	20 / 14			22 / 16			25 / 18			27 / 19			28 / 20			30 / 22			32 / 24		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-15	3.15	2.61	0.71	3.26	2.71	0.81	3.50	2.86	0.94	3.70	2.96	0.99	3.82	3.02	1.01	4.07	3.13	1.03	4.35	3.25	1.02
-5	3.13	2.62	0.61	3.26	2.73	0.72	3.54	2.90	0.83	3.77	3.02	0.88	3.90	3.08	0.89	4.18	3.20	0.90	4.49	3.34	0.88
0	3.23	2.71	0.59	3.38	2.82	0.69	3.67	3.00	0.81	3.91	3.13	0.85	4.04	3.19	0.86	4.33	3.32	0.87	4.65	3.46	0.84
10	3.55	2.96	0.58	3.70	3.09	0.69	4.01	3.28	0.80	4.26	3.41	0.85	4.40	3.47	0.86	4.71	3.61	0.86	5.04	3.76	0.83
20	3.85	3.20	0.63	4.00	3.33	0.75	4.32	3.52	0.88	4.58	3.65	0.93	4.72	3.72	0.95	5.03	3.86	0.95	5.37	4.01	0.91
25	3.93	3.27	0.69	4.09	3.40	0.82	4.40	3.59	0.96	4.66	3.72	1.01	4.80	3.79	1.03	5.11	3.93	1.03	5.45	4.08	1.00
32	3.92	3.26	0.80	4.07	3.38	0.95	4.38	3.57	1.10	4.63	3.70	1.17	4.77	3.76	1.18	5.08	3.90	1.19	5.41	4.05	1.16
35	3.86	3.20	0.86	4.00	3.33	1.01	4.30	3.51	1.18	3.50	2.80	0.89	4.69	3.70	1.27	4.99	3.84	1.28	5.33	3.98	1.25
40	3.65	3.03	0.99	3.79	3.15	1.15	4.07	3.33	1.33	4.32	3.45	1.41	4.45	3.52	1.43	4.75	3.65	1.45	5.08	3.79	1.43
43	3.45	2.88	1.07	3.59	2.99	1.24	3.87	3.17	1.43	4.10	3.29	1.52	4.24	3.35	1.54	4.53	3.48	1.57	4.85	3.62	1.55
46	3.20	2.67	1.17	3.33	2.79	1.35	3.60	2.96	1.55	3.83	3.07	1.64	3.96	3.13	1.67	4.25	3.26	1.70	4.56	3.39	1.68

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB)											
	16		18		20		21		22		24	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-30	2.65	1.37	2.28	1.29	2.13	1.32	2.13	1.37	2.18	1.46	2.42	1.71
-25	3.31	1.59	2.99	1.53	2.85	1.57	2.84	1.63	2.86	1.71	3.01	1.96
-20	3.97	1.80	3.71	1.76	3.57	1.81	3.55	1.88	3.54	1.96	3.61	2.22
-15	4.23	1.84	4.05	1.82	3.93	1.87	3.90	1.94	3.88	2.02	3.87	2.27
-10	4.89	2.07	4.76	2.07	4.66	2.14	4.61	2.20	4.56	2.29	4.46	2.53
-5	5.16	2.10	5.10	2.10	5.02	2.18	4.96	2.24	4.90	2.33	4.72	2.57
0	5.42	2.13	5.44	2.15	5.38	2.22	5.32	2.29	5.23	2.37	4.98	2.60
2	5.48	2.11	5.53	2.13	5.48	2.21	5.42	2.27	5.33	2.36	5.05	2.58
5	5.54	2.06	5.63	2.08	5.61	2.16	5.54	2.23	5.44	2.31	5.13	2.53
7	5.56	2.01	5.69	2.04	4.00	0.94	5.61	2.18	5.50	2.26	5.16	2.48
10	5.56	1.91	5.74	1.94	5.75	2.02	5.68	2.09	5.57	2.16	5.19	2.37
15	5.49	1.68	5.75	1.72	5.80	1.80	5.74	1.86	5.61	1.93	5.17	2.12
20	5.32	1.37	5.68	1.40	5.77	1.48	5.70	1.53	5.57	1.60	5.08	1.77
24	5.12	1.04	5.55	1.08	5.68	1.15	5.62	1.20	5.48	1.26	4.95	1.42

NOTE

- The performance table shows the average value of each conditions.
- Measurement under 5m condition of connection pipe.

2. Capacity Table

Nordic Airise S2

AR50F09C1CHNEE + AR50F09C1CHXEE

Cooling

TC : Total Capacity, SHC : Sensible Heat Capacity, PI : Power Input

Outdoor Temp. (°C, DB)	20 / 14			22 / 16			25 / 18			27 / 19			28 / 20			30 / 22			32 / 24		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-15	2.53	2.54	0.83	2.63	2.52	0.86	2.85	2.47	0.90	3.02	2.42	0.92	3.11	2.40	0.93	3.29	2.37	0.94	3.47	2.35	0.93
-5	2.67	2.72	0.74	2.79	2.69	0.77	3.04	2.63	0.80	3.23	2.58	0.82	3.33	2.56	0.82	3.53	2.52	0.83	3.73	2.50	0.82
0	2.76	2.81	0.70	2.89	2.79	0.73	3.15	2.72	0.76	3.35	2.67	0.78	3.45	2.65	0.78	3.66	2.61	0.78	3.86	2.59	0.78
10	2.93	2.98	0.65	3.08	2.96	0.68	3.35	2.89	0.71	3.55	2.84	0.73	3.66	2.81	0.73	3.88	2.77	0.73	4.09	2.75	0.73
20	3.04	3.07	0.66	3.18	3.05	0.69	3.46	2.98	0.72	3.66	2.93	0.74	3.77	2.90	0.74	3.99	2.86	0.75	4.20	2.84	0.74
25	3.04	3.07	0.69	3.19	3.04	0.72	3.45	2.98	0.76	3.66	2.93	0.78	3.76	2.90	0.78	3.98	2.86	0.78	4.19	2.84	0.78
32	2.97	2.99	0.77	3.10	2.96	0.81	3.36	2.90	0.85	3.56	2.85	0.87	3.66	2.83	0.87	3.87	2.79	0.88	4.08	2.77	0.87
35	2.90	2.92	0.83	3.04	2.90	0.86	3.29	2.84	0.90	2.50	2.00	0.56	3.58	2.76	0.93	3.79	2.72	0.93	3.99	2.70	0.93
40	2.74	2.76	0.93	2.86	2.74	0.97	3.11	2.68	1.02	3.29	2.63	1.04	3.39	2.61	1.04	3.59	2.57	1.05	3.78	2.56	1.05
43	2.61	2.64	1.01	2.73	2.62	1.05	2.96	2.56	1.10	3.14	2.51	1.12	3.23	2.49	1.13	3.43	2.45	1.14	3.61	2.44	1.14
46	2.45	2.49	1.10	2.56	2.47	1.14	2.78	2.41	1.19	2.96	2.37	1.22	3.05	2.34	1.22	3.23	2.31	1.23	3.41	2.29	1.23

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB)											
	16		18		20		21		22		24	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-30	2.02	1.15	1.73	1.09	1.61	1.12	1.61	1.17	1.65	1.24	1.86	1.46
-25	2.61	1.41	2.37	1.36	2.25	1.40	2.24	1.45	2.26	1.52	2.38	1.74
-20	3.20	1.67	3.00	1.64	2.89	1.69	2.86	1.74	2.86	1.81	2.91	2.03
-15	3.63	1.73	3.49	1.71	3.39	1.76	3.35	1.82	3.32	1.89	3.30	2.10
-10	4.06	1.79	3.97	1.79	3.88	1.84	3.84	1.90	3.79	1.97	3.69	2.18
-5	4.34	1.73	4.31	1.73	4.24	1.80	4.19	1.85	4.13	1.92	3.97	2.13
0	4.61	1.65	4.64	1.67	4.59	1.73	4.54	1.79	4.46	1.86	4.24	2.06
2	4.69	1.61	4.74	1.62	4.70	1.69	4.65	1.75	4.56	1.82	4.32	2.02
5	4.78	1.53	4.88	1.55	4.85	1.63	4.79	1.68	4.70	1.75	4.42	1.94
7	4.82	1.48	4.95	1.51	3.20	0.81	4.88	1.63	4.78	1.70	4.47	1.89
10	4.87	1.40	5.04	1.43	5.04	1.50	4.98	1.56	4.88	1.63	4.54	1.81
15	4.89	1.28	5.13	1.31	5.17	1.39	5.11	1.44	5.00	1.51	4.61	1.69
20	4.84	1.18	5.16	1.22	5.24	1.30	5.18	1.35	5.06	1.42	4.63	1.58
24	4.75	1.13	5.14	1.18	5.25	1.26	5.20	1.31	5.07	1.37	4.60	1.53

NOTE

- The performance table shows the average value of each conditions.
- Measurement under 5m condition of connection pipe.

2. Capacity Table

Nordic Airise S2

AR50F12C1CHNEE + AR50F12C1CHXEE

Cooling

TC : Total Capacity, SHC : Sensible Heat Capacity, PI : Power Input

Outdoor Temp. (°C, DB)	20 / 14			22 / 16			25 / 18			27 / 19			28 / 20			30 / 22			32 / 24		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-15	2.93	2.34	0.97	3.06	2.47	1.00	3.31	2.66	1.04	3.50	2.80	1.07	3.60	2.87	1.08	3.80	3.03	1.09	4.01	3.21	1.09
-5	2.99	2.39	0.85	3.14	2.53	0.88	3.42	2.75	0.93	3.63	2.91	0.95	3.74	2.99	0.96	3.97	3.16	0.97	4.20	3.36	0.96
0	3.09	2.47	0.82	3.25	2.62	0.85	3.54	2.85	0.90	3.76	3.01	0.92	3.88	3.10	0.93	4.11	3.28	0.93	4.35	3.48	0.92
10	3.35	2.68	0.82	3.52	2.84	0.85	3.83	3.08	0.90	4.07	3.25	0.92	4.19	3.34	0.93	4.43	3.53	0.93	4.68	3.75	0.92
20	3.58	2.86	0.90	3.76	3.03	0.93	4.07	3.27	0.98	4.31	3.45	1.01	4.43	3.54	1.02	4.68	3.73	1.02	4.94	3.95	1.01
25	3.64	2.91	0.97	3.82	3.07	1.01	4.13	3.32	1.06	4.36	3.49	1.09	4.49	3.58	1.10	4.74	3.78	1.10	4.99	3.99	1.09
32	3.62	2.89	1.11	3.79	3.05	1.16	4.10	3.29	1.21	4.33	3.46	1.24	4.45	3.55	1.25	4.69	3.74	1.26	4.95	3.96	1.25
35	3.56	2.85	1.19	3.73	3.00	1.23	4.03	3.24	1.29	3.50	2.80	0.92	4.38	3.50	1.34	4.62	3.69	1.35	4.87	3.90	1.34
40	3.39	2.71	1.34	3.55	2.86	1.39	3.84	3.09	1.45	4.06	3.25	1.49	4.18	3.34	1.50	4.42	3.52	1.51	4.66	3.73	1.50
43	3.23	2.58	1.44	3.39	2.73	1.49	3.67	2.95	1.56	3.89	3.11	1.60	4.00	3.20	1.61	4.24	3.38	1.62	4.48	3.58	1.62
46	3.03	2.42	1.55	3.18	2.56	1.60	3.46	2.78	1.68	3.67	2.94	1.72	3.78	3.02	1.73	4.01	3.19	1.75	4.24	3.39	1.74

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB)											
	16		18		20		21		22		24	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-30	2.02	1.16	1.72	1.08	1.61	1.10	1.61	1.15	1.66	1.23	1.86	1.47
-25	2.80	1.55	2.55	1.49	2.43	1.53	2.42	1.58	2.44	1.67	2.56	1.91
-20	3.59	1.95	3.38	1.91	3.26	1.97	3.24	2.03	3.23	2.12	3.27	2.37
-15	4.12	2.10	3.96	2.08	3.86	2.14	3.82	2.21	3.79	2.30	3.75	2.55
-10	4.65	2.24	4.54	2.24	4.45	2.32	4.40	2.39	4.35	2.48	4.23	2.73
-5	4.94	2.21	4.89	2.22	4.82	2.31	4.77	2.38	4.70	2.47	4.51	2.72
0	5.23	2.17	5.24	2.19	5.19	2.28	5.13	2.35	5.05	2.44	4.79	2.68
2	5.29	2.12	5.33	2.14	5.29	2.23	5.23	2.31	5.14	2.40	4.86	2.64
5	5.35	2.03	5.43	2.06	5.41	2.15	5.34	2.22	5.25	2.31	4.94	2.54
7	5.37	1.95	5.48	1.99	4.00	1.10	5.40	2.15	5.30	2.24	4.97	2.47
10	5.36	1.83	5.52	1.87	5.53	1.96	5.47	2.03	5.36	2.11	4.99	2.34
15	5.28	1.61	5.52	1.65	5.56	1.73	5.50	1.80	5.38	1.88	4.96	2.09
20	5.10	1.36	5.42	1.40	5.50	1.48	5.44	1.54	5.32	1.61	4.86	1.81
24	4.89	1.16	5.28	1.20	5.40	1.27	5.34	1.33	5.22	1.39	4.72	1.57

NOTE

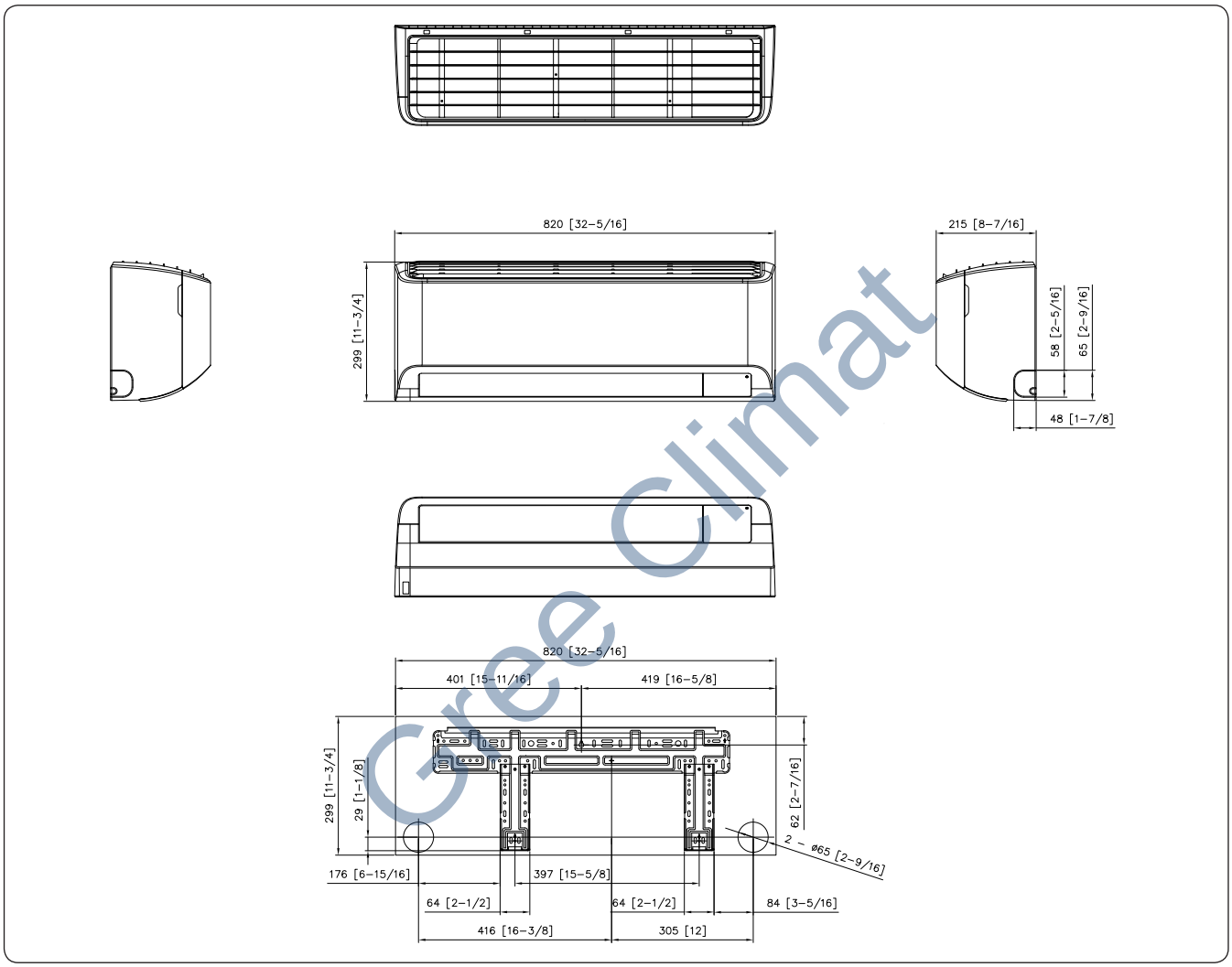
- The performance table shows the average value of each conditions.
- Measurement under 5m condition of connection pipe.

3. Dimensional Drawing

Indoor units

AR50F09C1CHNEE, AR50F12C1CHNEE

Unit: mm (inches)

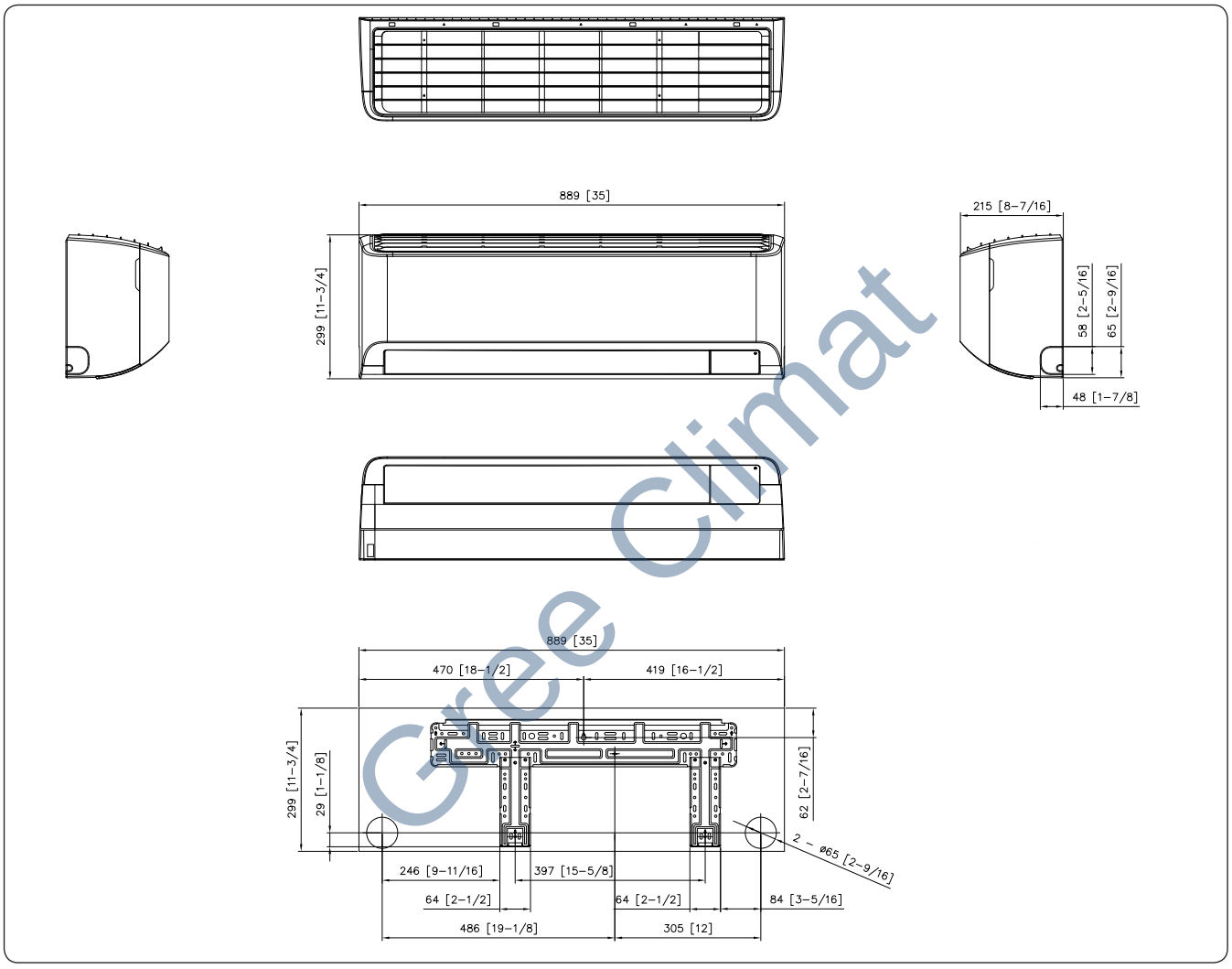


3. Dimensional Drawing

Indoor units

AR70F09CABWNEE, AR70F12CABWNEE, AR60F09C1CWNEE, AR60F12C1CWNEE, AR50H09C1BHNEE AR50H12C1BHNEE

Unit: mm (inches)

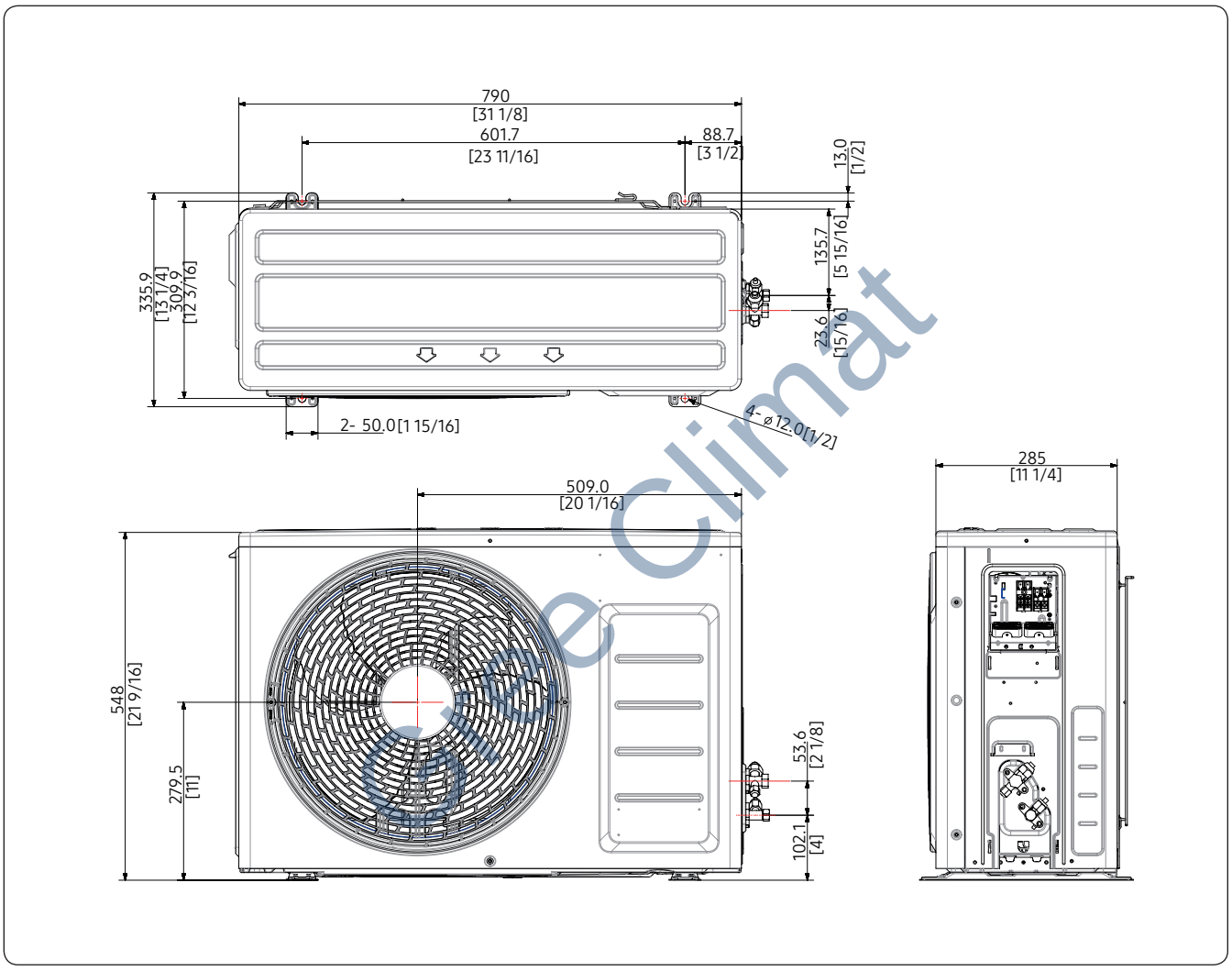


3. Dimensional Drawing

Outdoor units

AR70F09CABWXEE, AR70F12CABWXEE, AR60F09C1CWXEE, AR60F12C1CWXEE, AR50F09C1CHXEE
AR50F12C1CHXEE, AR50H09C1BHXEE, AR50H12C1BHXEE

Unit: mm (inches)

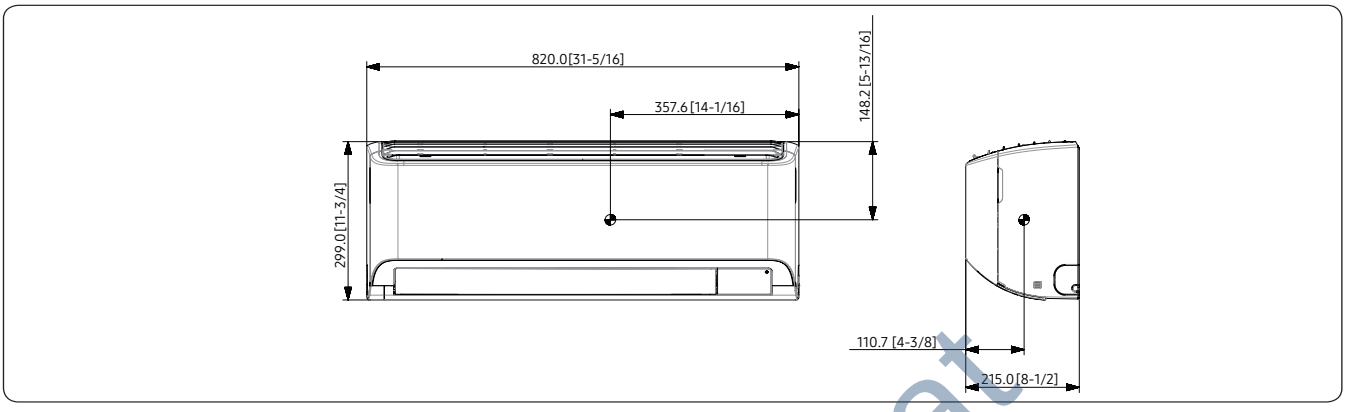


4. Center of Gravity

Indoor units

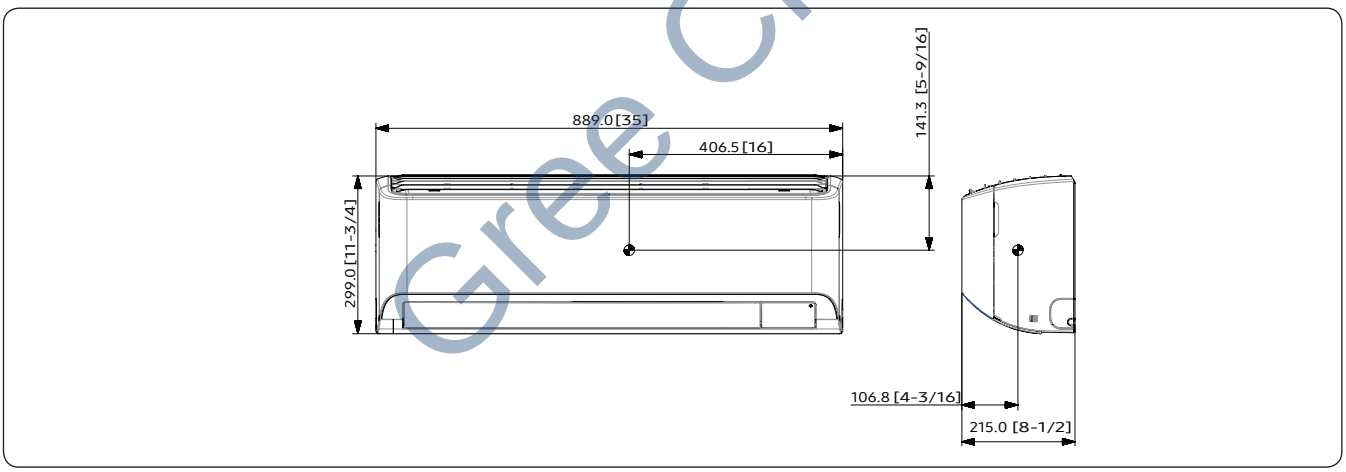
AR50F09C1CHNEE, AR50F12C1CHNEE

Unit: mm (inches)



AR70F09CABWNEE, AR70F12CABWNEE, AR60F09C1CWNEE, AR60F12C1CWNEE, AR50H09C1BHNEE AR50H12C1BHNEE

Unit: mm (inches)

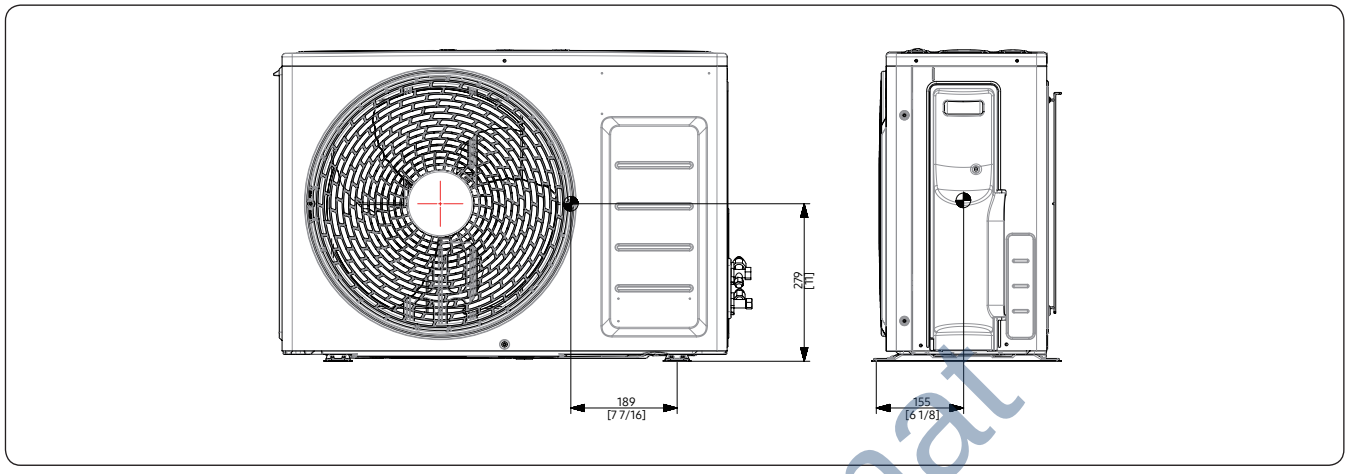


4. Center of Gravity

Outdoor units

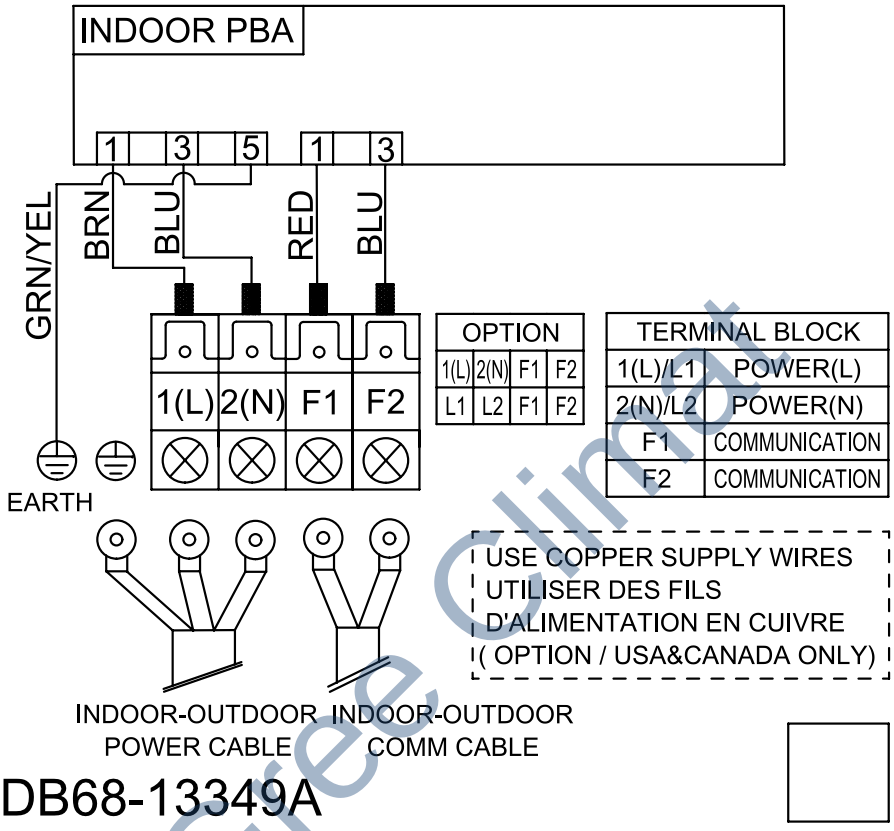
AR70F09CABWXEE, AR70F12CABWXEE, AR60F09C1CWXEE, AR60F12C1CWXEE, AR50F09C1CHXEE AR50F12C1CHXEE, AR50H09C1BHXEE, AR50H12C1BHXEE

Unit: mm (inches)



5. Electrical Wiring Diagram

Indoor units

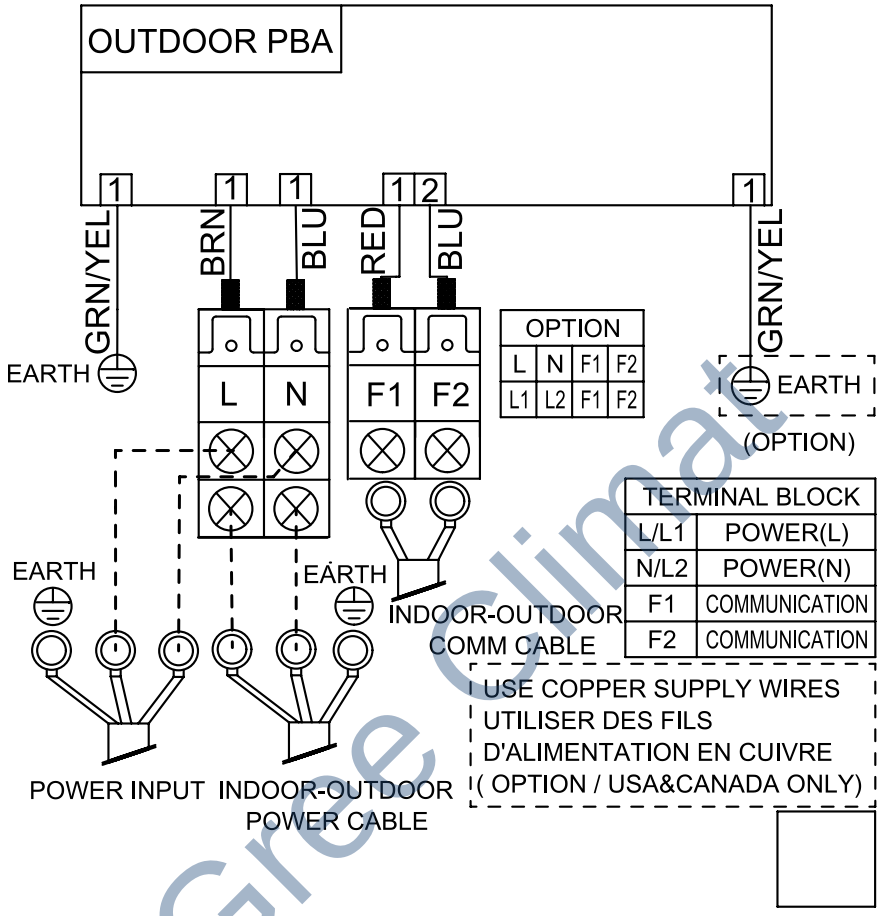


NOTE

- This wiring diagram applies only to the indoor unit.
- Colors BRN : brown, GRN/YEL : green/yellow, RED : red, BLU : blue
- ⏚ : Protective earth(screw)

5. Electrical Wiring Diagram

Outdoor units



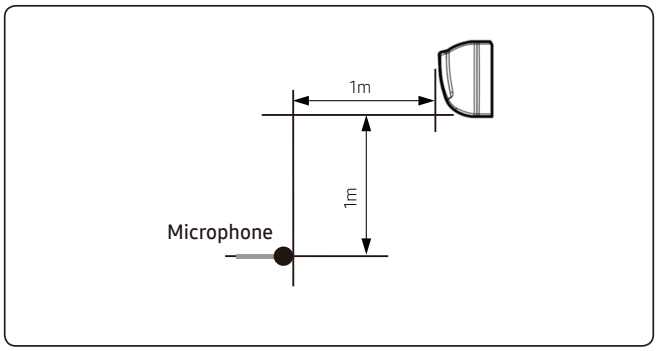
NOTE

- This wiring diagram applies only to the outdoor unit.
- Colors BRN : brown, GRN/YEL : green/yellow, RED : red, BLU : blue
- ⏚: Protective earth(screw)

6. Sound Data

Indoor units

Sound Pressure level

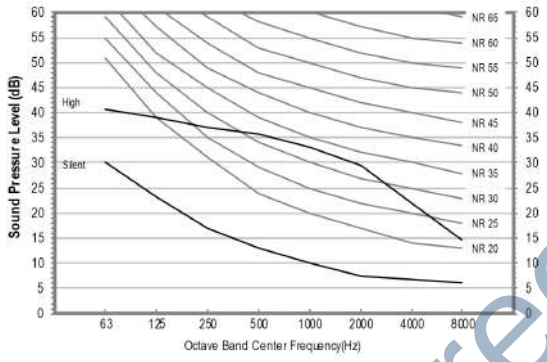


Unit: dB(A)

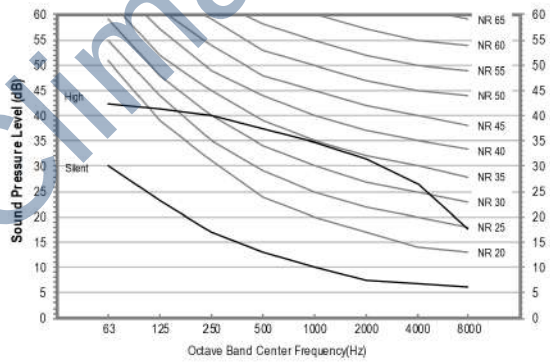
Model	Cooling	
	High	Silent
AR70F09CABWNEE	38	17
AR70F12CABWNEE	40	17
AR60F09C1CWNEE	38	17
AR60F12C1CWNEE	40	17

- NR Curve

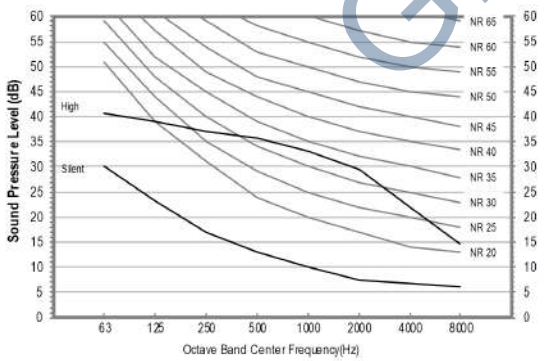
1) AR70F09CABWNEE



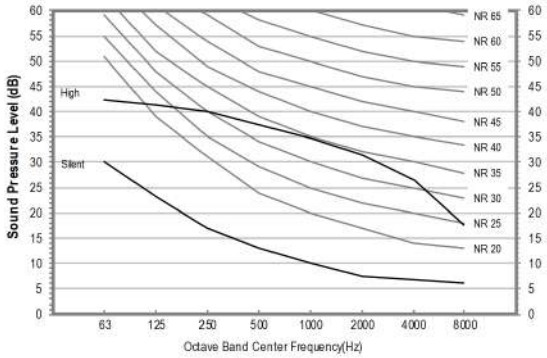
2) AR70F12CABWNEE



3) AR60F09C1CWNEE



4) AR60F12C1CWNEE



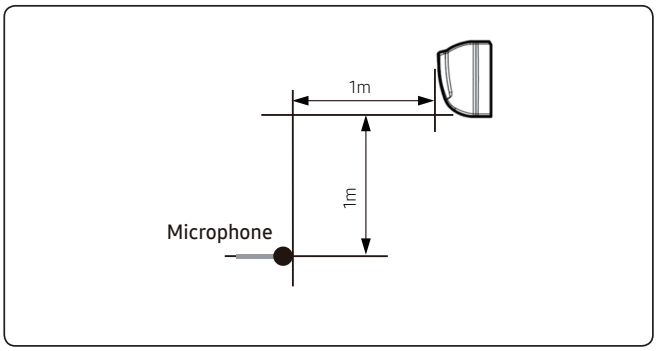
NOTE

- Specifications may be subject to change without prior notice.
- Sound pressure Level
  - Sound pressure level is obtained in an anechoic room.
  - Sound pressure level is a relative value, depending on the distance and acoustic environment.
  - Sound pressure level may differ depending on operation condition.
  - dBA = A weighted sound pressure level
  - Reference acoustic pressure 0 dB = 20μPa

6. Sound Data

Indoor units

Sound Pressure level

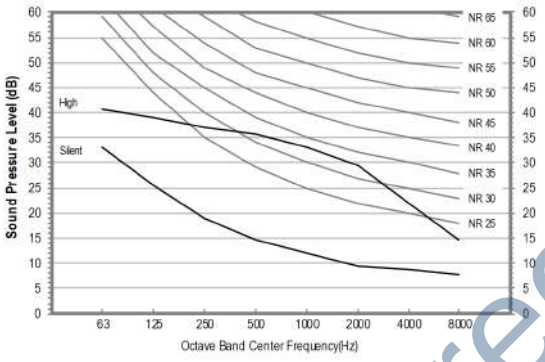


Unit: dB(A)

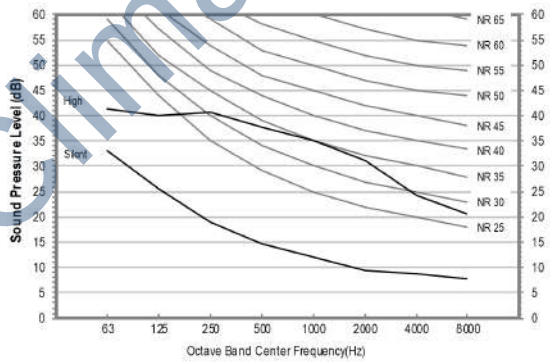
Model	Cooling	
	High	Silent
AR50F09C1CHNEE	38	19
AR50F12C1CHNEE	40	19
AR50H09C1BHNEE	38	17
AR50H12C1BHNEE	40	17

- NR Curve

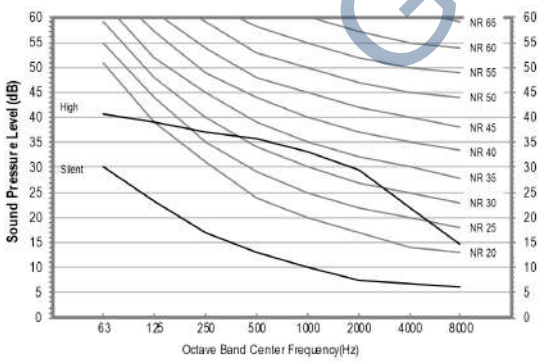
1) AR50F09C1CHNEE



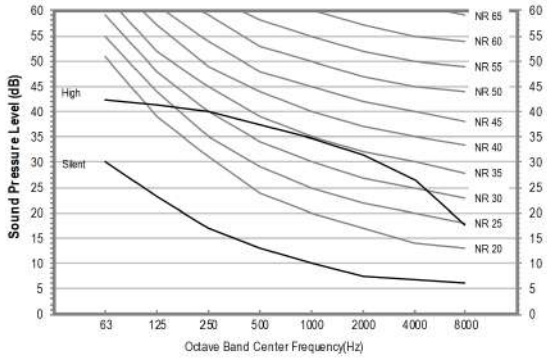
2) AR50F12C1CHNEE



3) AR50H09C1BHNEE



4) AR50H12C1BHNEE



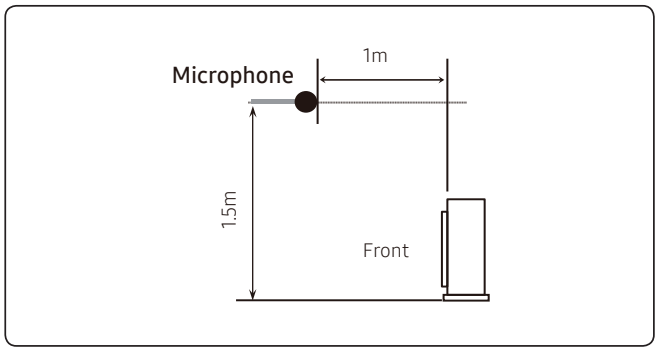
NOTE

- Specifications may be subject to change without prior notice.
- Sound pressure Level
  - Sound pressure level is obtained in an anechoic room.
  - Sound pressure level is a relative value, depending on the distance and acoustic environment.
  - Sound pressure level may differ depending on operation condition.
  - dBA = A weighted sound pressure level
  - Reference acoustic pressure 0 dB = 20μPa

6. Sound Data

Outdoor units

Sound Pressure level

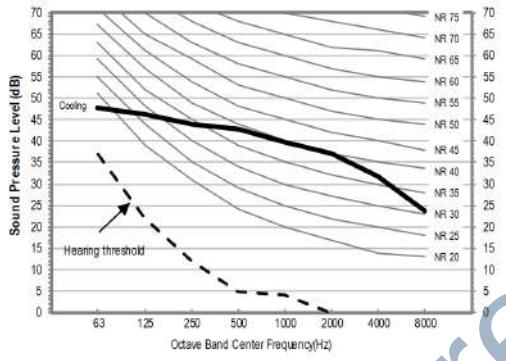


Unit: dB(A)

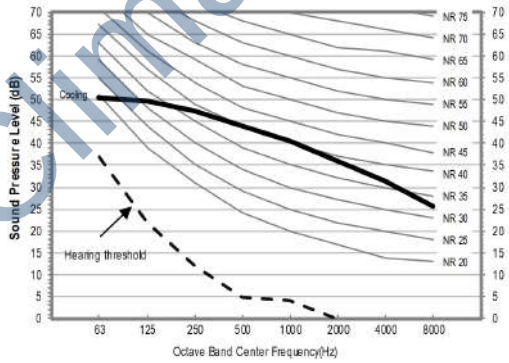
Model	Cooling
AR70F09CABWXEE	45
AR70F12CABWXEE	46
AR60F09C1CWXEE	45
AR60F12C1CWXEE	46

- NR Curve

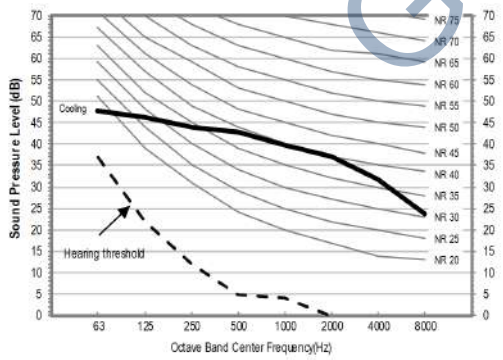
1) AR70F09CABWXEE



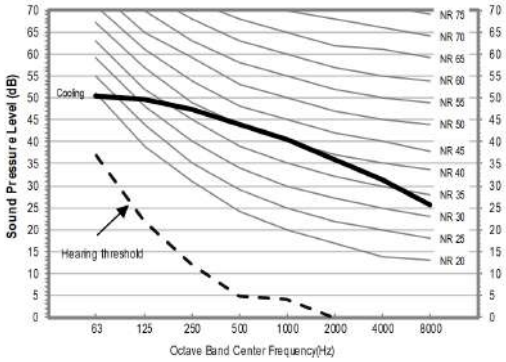
2) AR70F12CABWXEE



3) AR60F09C1CWXEE



4) AR60F12C1CWXEE



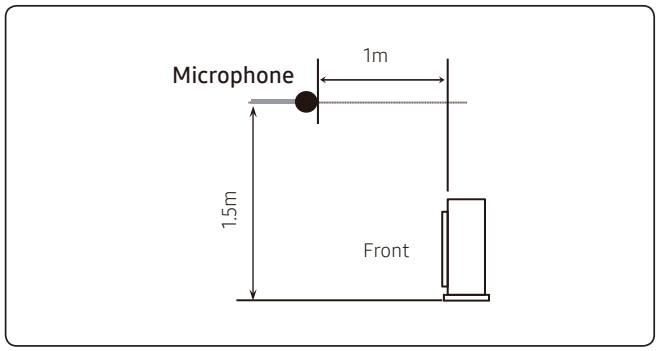
NOTE

- Specifications may be subject to change without prior notice.
- Sound pressure Level
  - Sound pressure level is obtained in an anechoic room.
  - Sound pressure level is a relative value, depending on the distance and acoustic environment.
  - Sound pressure level may differ depending on operation condition.
  - dBA = A weighted sound pressure level
  - Reference acoustic pressure 0 dB = 20μPa

6. Sound Data

Outdoor units

Sound Pressure level

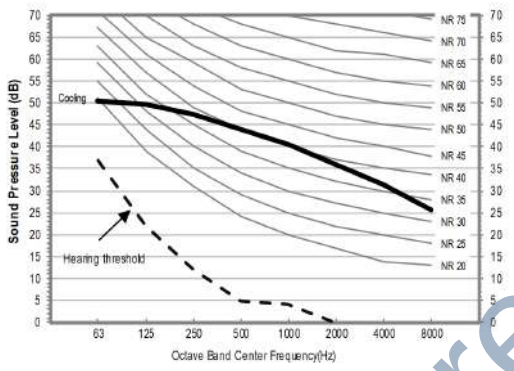


Unit: dB(A)

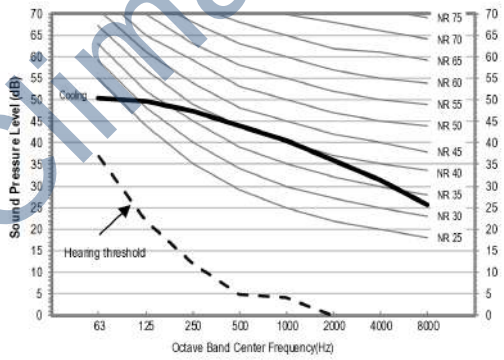
Model	Cooling
AR50F09C1CHXEE	46
AR50F12C1CHXEE	46
AR50H09C1BHXEE	45
AR50H12C1BHXEE	46

- NR Curve

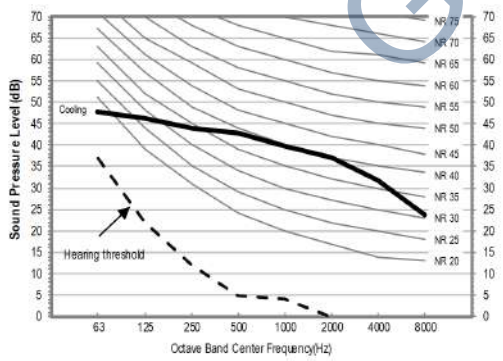
1) AR50F09C1CHXEE



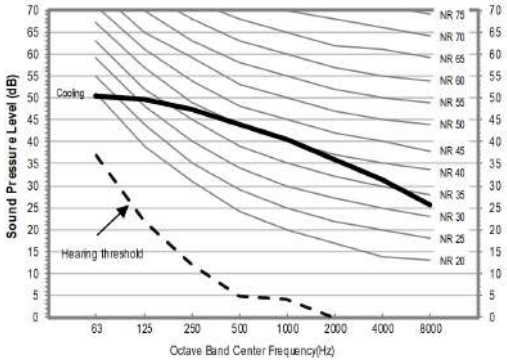
2) AR50F12C1CHXEE



3) AR50H09C1BHXEE



4) AR50H12C1BHXEE



NOTE

- Specifications may be subject to change without prior notice.
- Sound pressure Level
  - Sound pressure level is obtained in an anechoic room.
  - Sound pressure level is a relative value, depending on the distance and acoustic environment.
  - Sound pressure level may differ depending on operation condition.
  - dBA = A weighted sound pressure level
  - Reference acoustic pressure 0 dB = 20μPa

6. Sound Data

Indoor units

Sound Power level

Unit: dB(A)

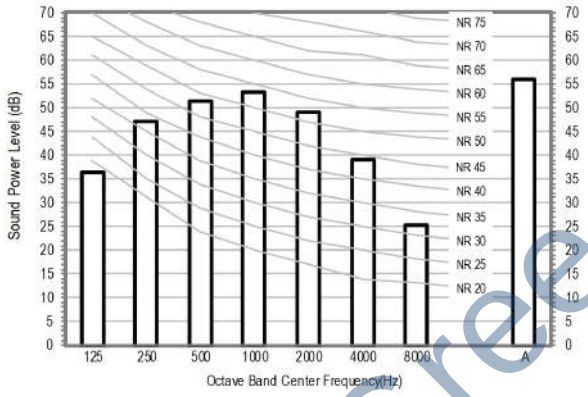
Model	Cooling
AR70F09CABWNEE	56
AR70F12CABWNEE	58
AR60F09C1CWNEE	56
AR60F12C1CWNEE	58

NOTE

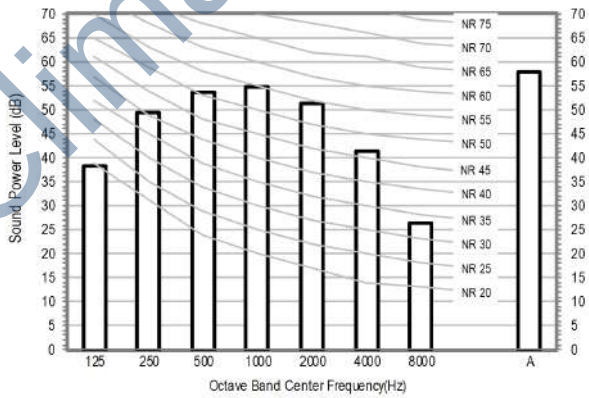
- Specifications may be subject to change without prior notice.
  - Sound power level is an absolute value that a sound source generates.
  - dBA = A-weighted sound power level.
  - Reference power : 1pW.
  - Measured according to ISO 3741.

- NR Curve

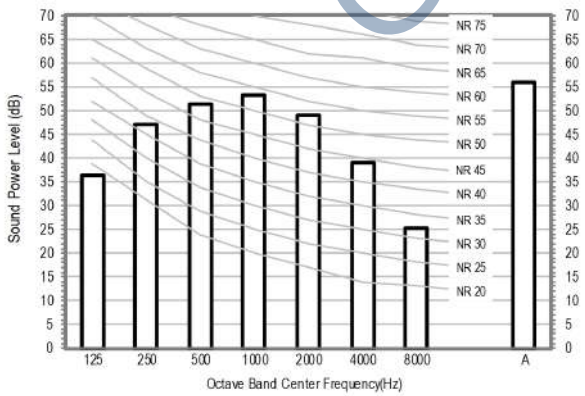
1) AR70F09CABWNEE



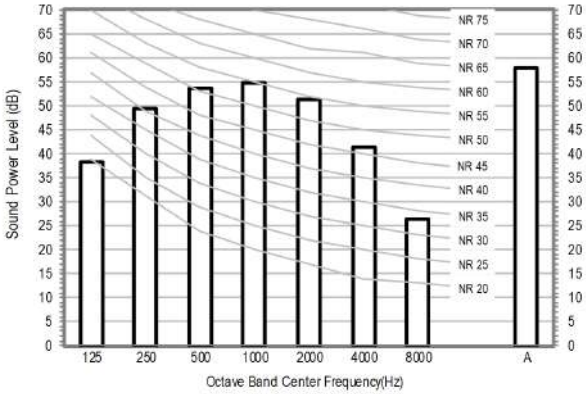
2) AR70F12CABWNEE



3) AR60F09C1CWNEE



4) AR60F12C1CWNEE



6. Sound Data

Indoor units

Sound Power level

Unit: dB(A)

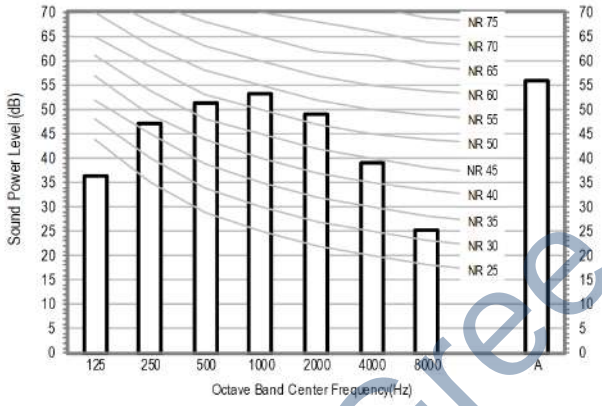
Model	Cooling
AR50F09C1CHNEE	56
AR50F12C1CHNEE	58
AR50H09C1BHNEE	56
AR50H12C1BHNEE	58

NOTE

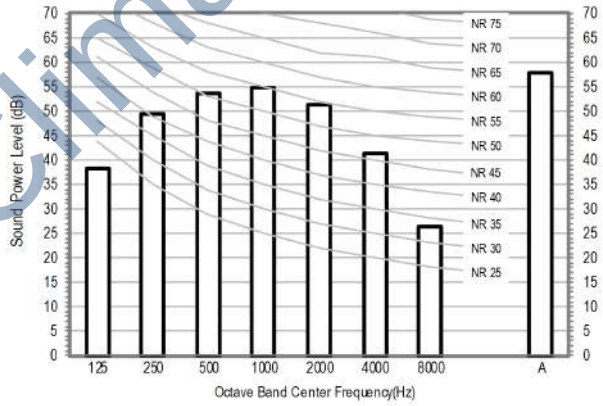
- Specifications may be subject to change without prior notice.
  - Sound power level is an absolute value that a sound source generates.
  - dBA = A-weighted sound power level.
  - Reference power : 1pW.
  - Measured according to ISO 3741.

- NR Curve

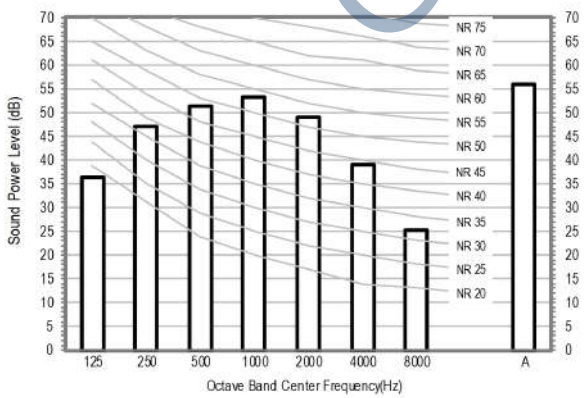
1) AR50F09C1CHNEE



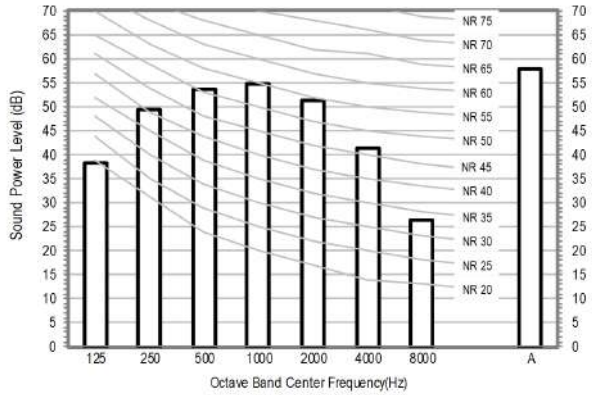
2) AR50F12C1CHNEE



3) AR50H09C1BHNEE



4) AR50H12C1BHNEE



6. Sound Data

Outdoor units

Sound Power level

Unit: dB(A)

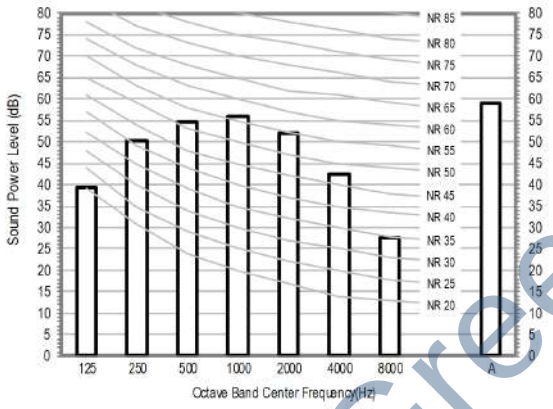
Model	Cooling
AR70F09CABWXEE	59
AR70F12CABWXEE	62
AR60F09C1CWXEE	59
AR60F12C1CWXEE	62

NOTE

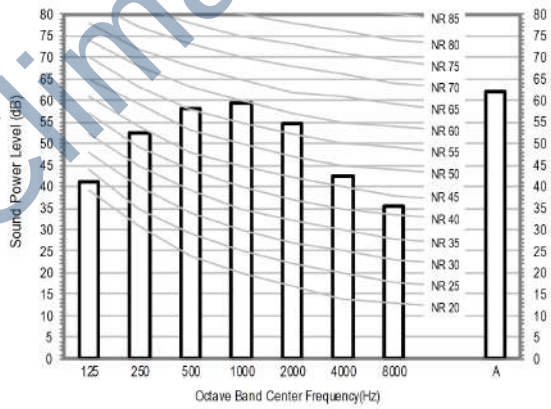
- Specifications may be subject to change without prior notice.
  - Sound power level is an absolute value that a sound source generates.
  - dBA = A-weighted sound power level.
  - Reference power : 1pW.
  - Measured according to ISO 3741.

- NR Curve

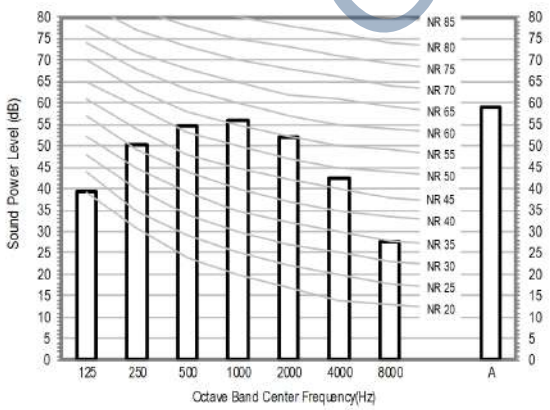
1) AR70F09CABWXEE



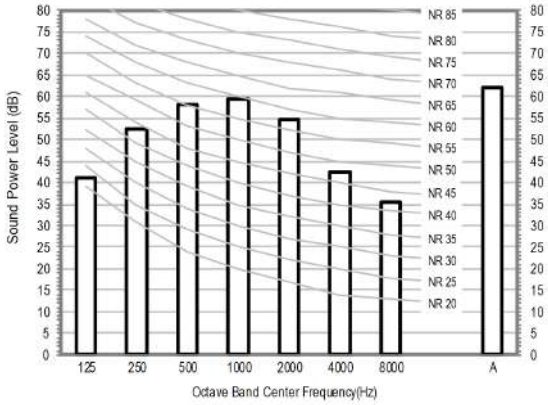
2) AR70F12CABWXEE



3) AR60F09C1CWXEE



4) AR60F12C1CWXEE



6. Sound Data

Outdoor units

Sound Power level

Unit: dB(A)

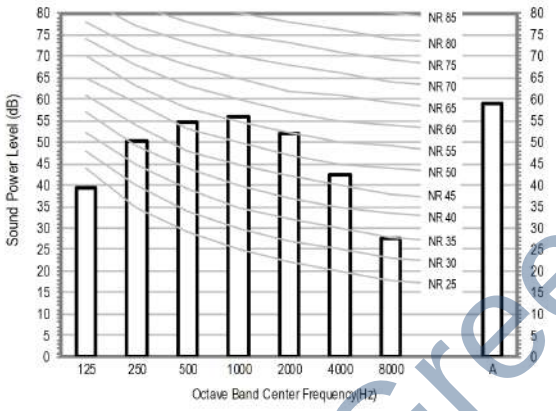
Model	Cooling
AR50F09C1CHXEE	59
AR50F12C1CHXEE	62
AR50H09C1BHXEE	59
AR50H12C1BHXEE	62

NOTE

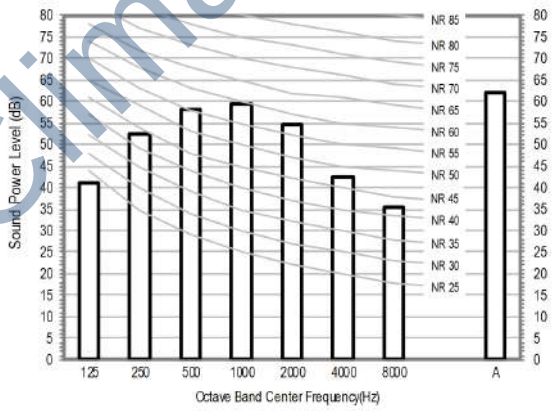
- Specifications may be subject to change without prior notice.
  - Sound power level is an absolute value that a sound source generates.
  - dBA = A-weighted sound power level.
  - Reference power : 1pW.
  - Measured according to ISO 3741.

- NR Curve

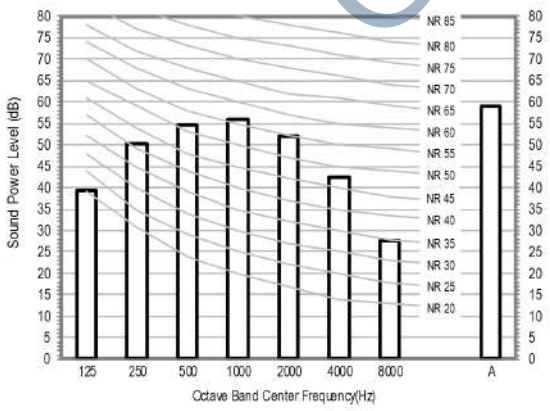
1) AR50F09C1CHXEE



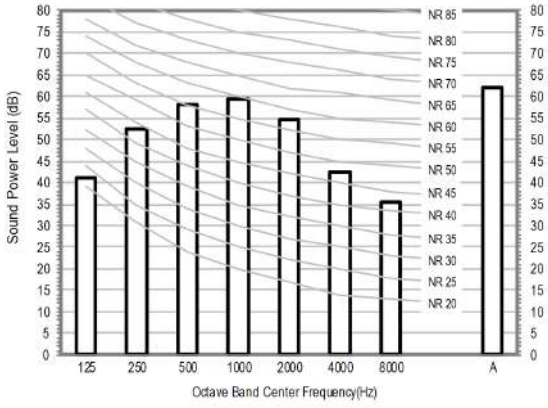
2) AR50F12C1CHXEE



3) AR50H09C1BHXEE



4) AR50H12C1BHXEE



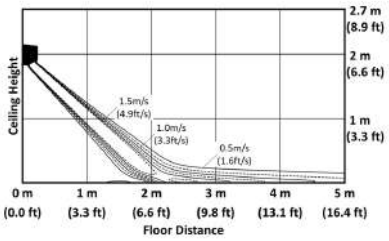
7. Temperature and air flow distribution

Nordic WindFree™ Geo S2

AR70F09CABWNEE + AR70F09CABWXEE

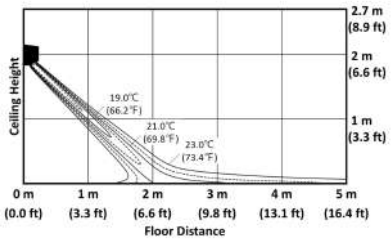
- Cooling air velocity distribution

(Discharge angle : 20 degree)



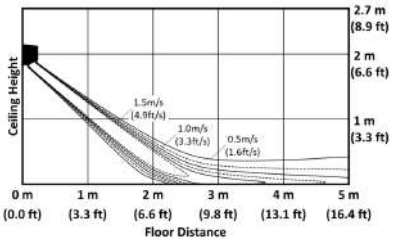
- Cooling Temperature distribution

(Discharge angle : 20 degree)



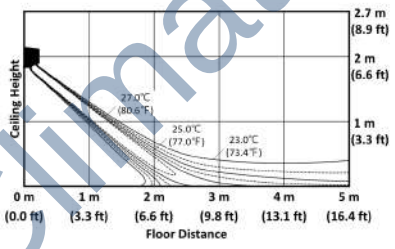
- Heating air velocity distribution

(Discharge angle : 30 degree)



- Heating Temperature distribution

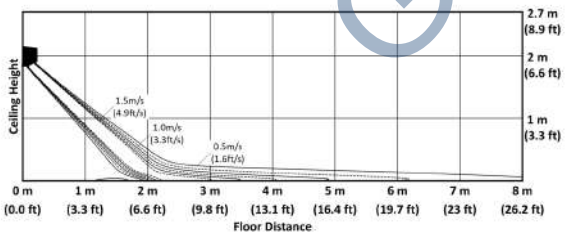
(Discharge angle : 30 degree)



AR70F12CABWNEE + AR70F12CABWXEE

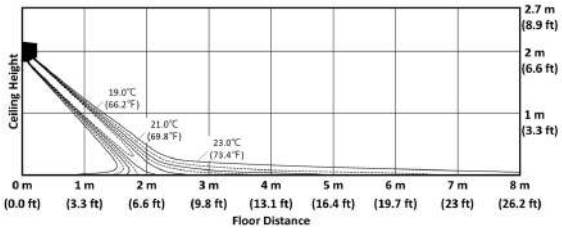
- Cooling air velocity distribution

(Discharge angle : 20 degree)



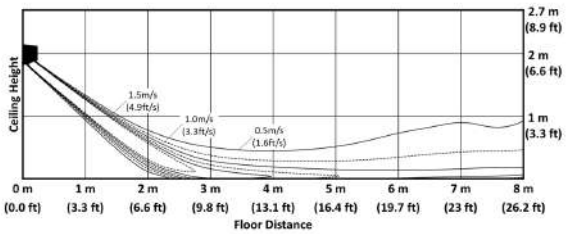
- Cooling Temperature distribution

(Discharge angle : 20 degree)



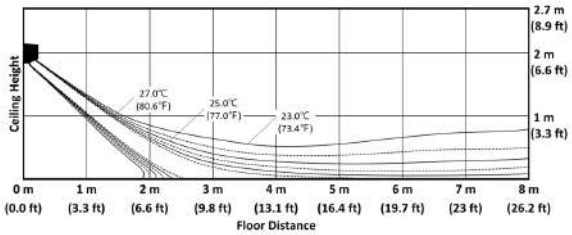
- Heating air velocity distribution

(Discharge angle : 30 degree)



- Heating Temperature distribution

(Discharge angle : 30 degree)



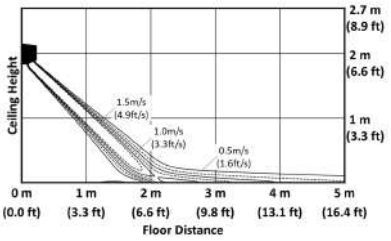
7. Temperature and air flow distribution

Nordic WindFree™ Comfort S2

AR60F09C1CWNEE + AR60F09C1CWXEE

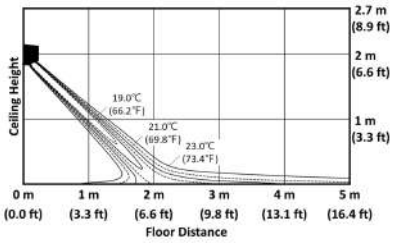
- Cooling air velocity distribution

(Discharge angle : 20 degree)



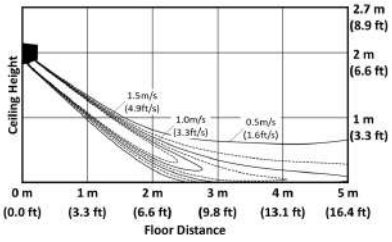
- Cooling Temperature distribution

(Discharge angle : 20 degree)



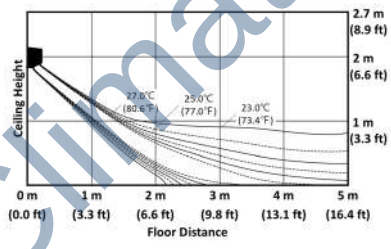
- Heating air velocity distribution

(Discharge angle : 30 degree)



- Heating Temperature distribution

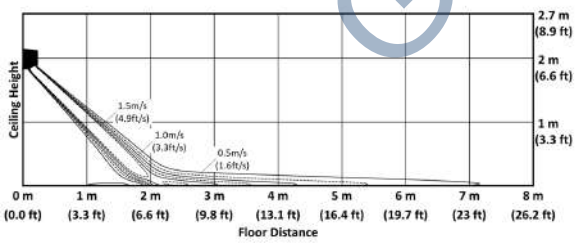
(Discharge angle : 30 degree)



AR60F12C1CWNEE + AR60F12C1CWXEE

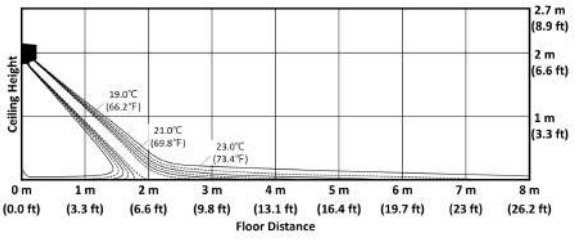
- Cooling air velocity distribution

(Discharge angle : 20 degree)



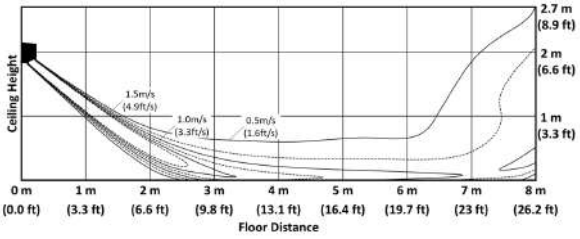
- Cooling Temperature distribution

(Discharge angle : 20 degree)



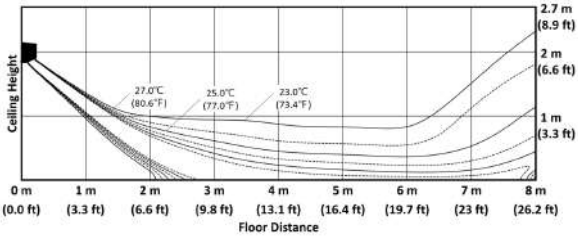
- Heating air velocity distribution

(Discharge angle : 30 degree)



- Heating Temperature distribution

(Discharge angle : 30 degree)



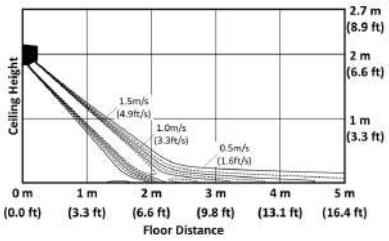
7. Temperature and air flow distribution

Nordic Airise Premium S2

AR50H09C1BHNEE + AR50H09C1BHXEE

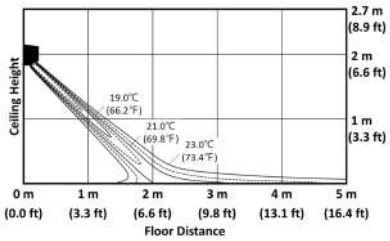
- Cooling air velocity distribution

(Discharge angle : 20 degree)



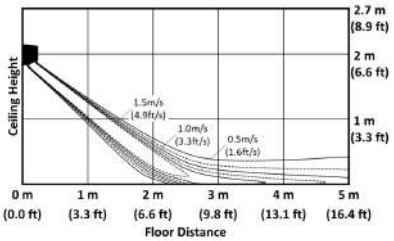
- Cooling Temperature distribution

(Discharge angle : 20 degree)



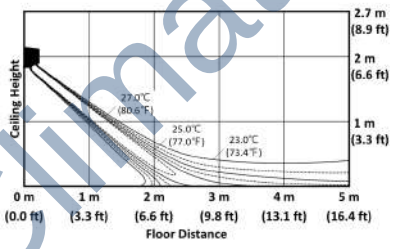
- Heating air velocity distribution

(Discharge angle : 30 degree)



- Heating Temperature distribution

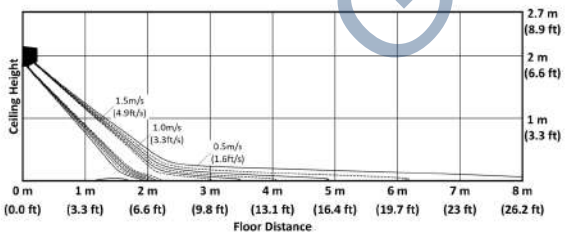
(Discharge angle : 30 degree)



AR50H12C1BHNEE + AR50H12C1BHXEE

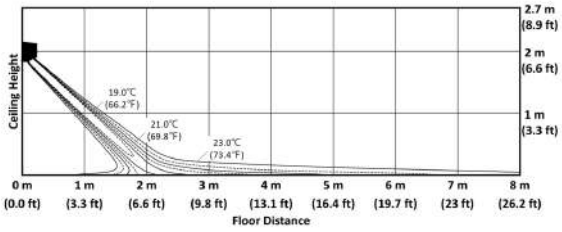
- Cooling air velocity distribution

(Discharge angle : 20 degree)



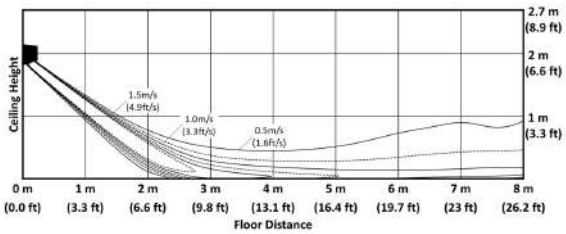
- Cooling Temperature distribution

(Discharge angle : 20 degree)



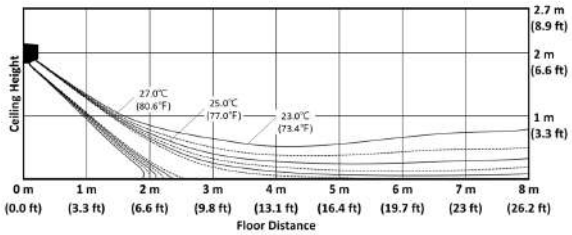
- Heating air velocity distribution

(Discharge angle : 30 degree)



- Heating Temperature distribution

(Discharge angle : 30 degree)



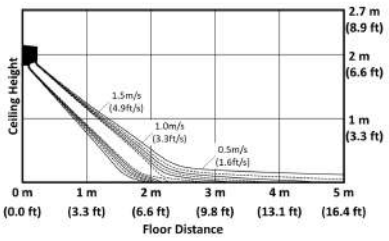
7. Temperature and air flow distribution

Nordic Airise S2

AR50F09C1CHNEE + AR50F09C1CHXEE

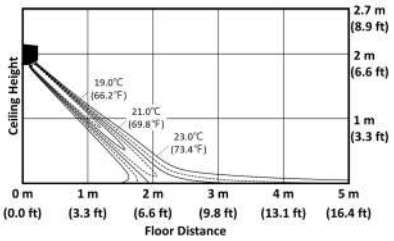
- Cooling air velocity distribution

(Discharge angle : 20 degree)



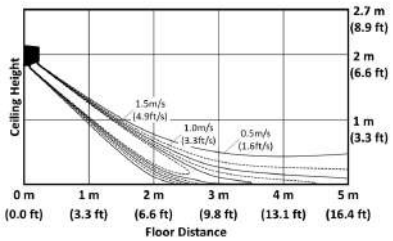
- Cooling Temperature distribution

(Discharge angle : 20 degree)



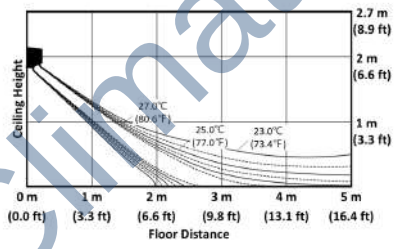
- Heating air velocity distribution

(Discharge angle : 30 degree)



- Heating Temperature distribution

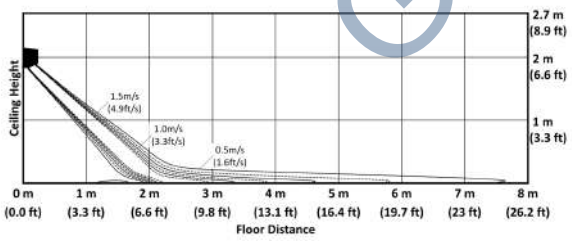
(Discharge angle : 30 degree)



AR50F12C1CHNEE + AR50F12C1CHXEE

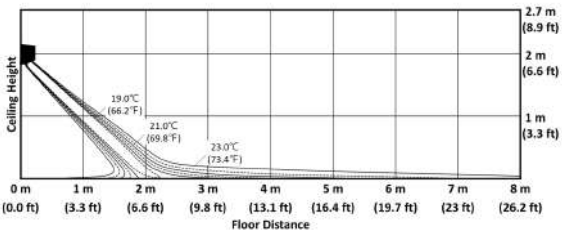
- Cooling air velocity distribution

(Discharge angle : 20 degree)



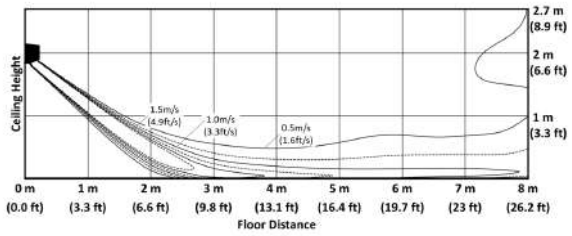
- Cooling Temperature distribution

(Discharge angle : 20 degree)



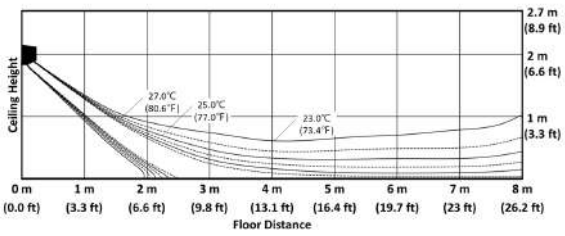
- Heating air velocity distribution

(Discharge angle : 30 degree)

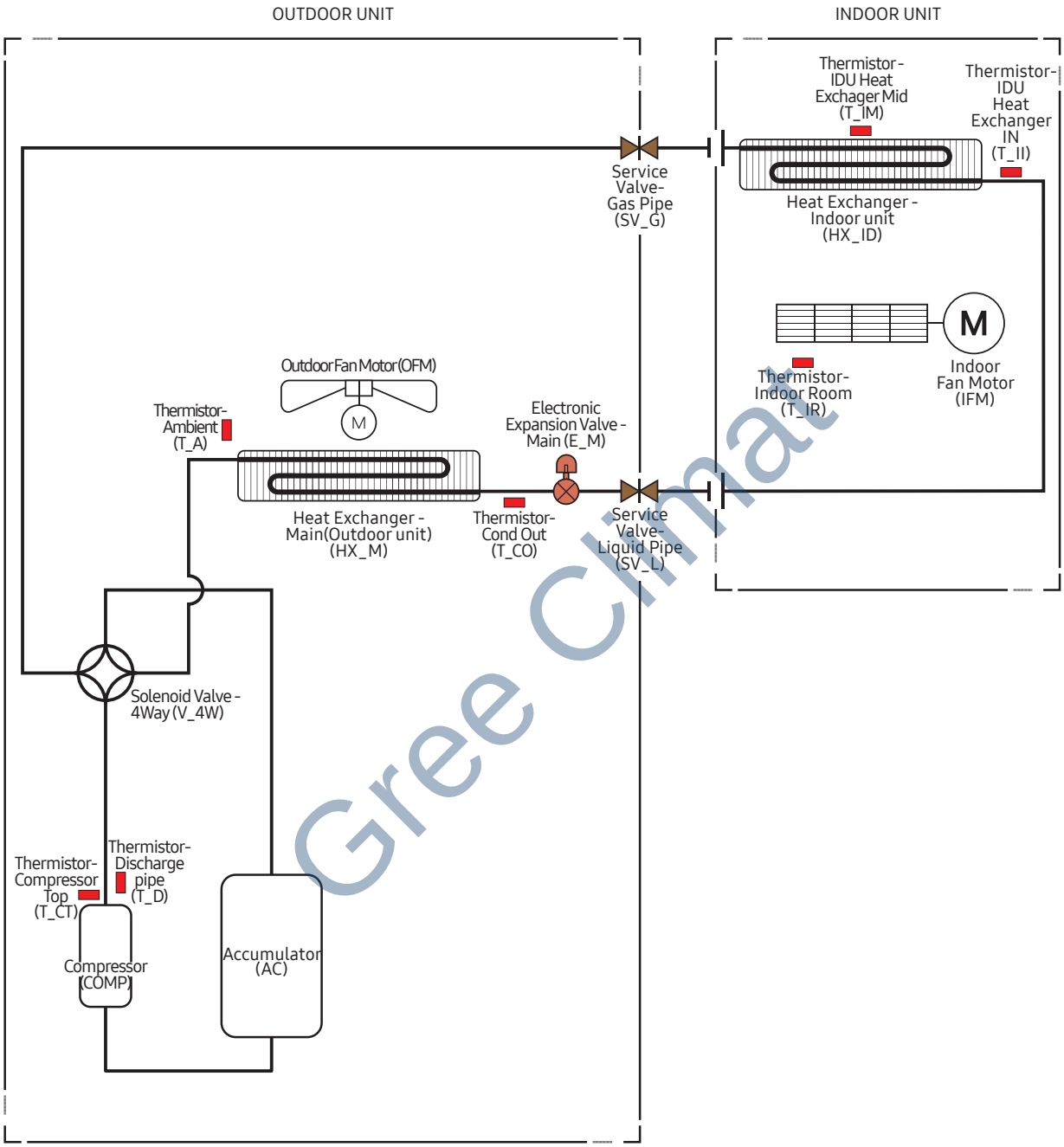


- Heating Temperature distribution

(Discharge angle : 30 degree)



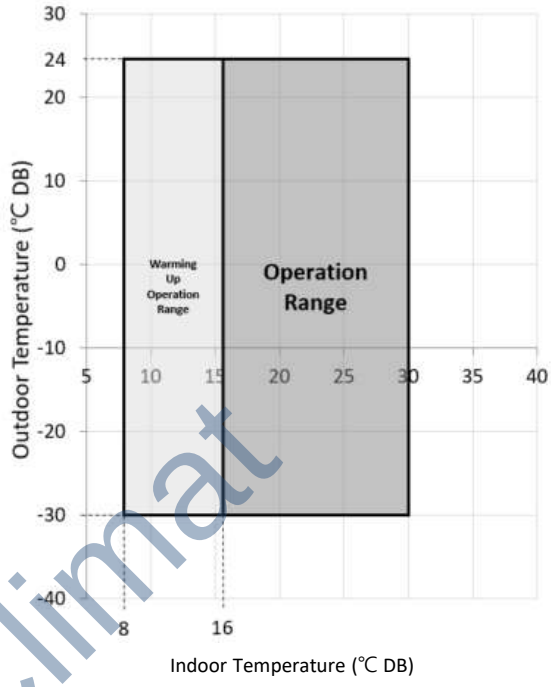
8. Piping Diagram



9. Operation Limit

Cooling

Heating

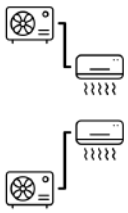


10. Capacity Correction

Outdoor units

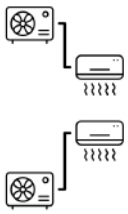
AR60F09C1CWXEE, AR60F12C1CWXEE

Cooling



Level Difference (m)	Pipe Length (m)			
	5	10	12.5	15
8	-	0.96	0.95	0.94
5	0.99	0.97	0.96	0.95
0	1	0.98	0.97	0.96
-5	0.99	0.97	0.96	0.95
-8	-	0.96	0.95	0.94

Heating



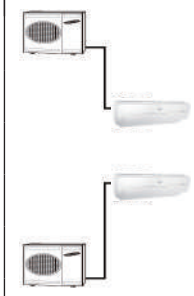
Level Difference (m)	Pipe Length (m)			
	5	10	12.5	15
8	-	0.96	0.95	0.94
5	0.99	0.97	0.96	0.95
0	1	0.98	0.97	0.96
-5	0.99	0.97	0.96	0.95
-8	-	0.96	0.95	0.94

10. Capacity Correction

Outdoor units

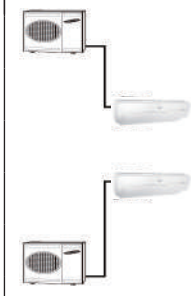
AR70F09CABWXEE, AR70F12CABWXEE, AR50H09C1BHXEE, AR50H12C1BHXEE, AR50F09C1CHXEE
AR50F12C1CHXEE

Cooling



Level Difference (m)	Pipe Length (m)				
	5	10	12.5	15	20
10	-	0.95	0.94	0.93	0.91
7	-	0.96	0.95	0.94	0.92
5	0.99	0.97	0.96	0.95	0.93
0	1	0.98	0.97	0.96	0.94
-5	0.99	0.97	0.96	0.95	0.93
-7	-	0.96	0.95	0.94	0.92
-10	-	0.95	0.94	0.93	0.91

Heating



Level Difference (m)	Pipe Length (m)				
	5	10	12.5	15	20
10	-	0.95	0.94	0.93	0.91
7	-	0.96	0.95	0.94	0.92
5	0.99	0.97	0.96	0.95	0.93
0	1	0.98	0.97	0.96	0.94
-5	0.99	0.97	0.96	0.95	0.93
-7	-	0.96	0.95	0.94	0.92
-10	-	0.95	0.94	0.93	0.91

11. Installation

Installation of the product

- Our units must be installed in compliance with the spaces indicated in the installation manual to ensure either accessibility from both sides or ability to perform routine maintenance and repairs. The units' components must be accessible and that can be disassembled in conditions of complete safety either for people or things. For this reason, where it is not observed as indicated into the Installation Manual, the cost necessary to reach and repair the unit (in safety, as required by current regulations in force) with slings, trucks, scaffolding or any other means of elevation won't be considered in-warranty and will be charged to end user.
- The outdoor unit shall be installed in an open space that is always ventilated.
- The local gas regulations shall be observed.
- To handle, purge, and dispose the refrigerant, or break into the refrigerant circuit, the worker should have a certificate from an industry-accredited authority.
- The installation of pipings shall be kept to a minimum.
- Do not install the indoor unit in the following areas:
  - Area filled with minerals, splashed oil, or steam. It will deteriorate plastic parts, causing failure or leakage.
  - Area that is close to heat sources.
  - Area that produces substances such as sulfuric gas, chlorine gas, acid, and alkali. It may cause corrosion of the pipings and brazed joints.
  - Area that can cause leakage of combustible gas and suspension of carbon fibers, flammable dust, or volatile flammables.
  - Area where refrigerant leaks and settles.
  - Area where animals may urinate on the product and the product may get in contact with ammonia.
- Do not use the indoor unit for preservation of food items, plants, equipment, and art works. This may cause deterioration of their quality.
- Do not install the indoor unit if it has any drainage problem.
- Because your air conditioner contains R-32 refrigerant, make sure that it is installed, operated, and stored it in a room whose floor area is larger than the minimum required floor area specified in the following table:

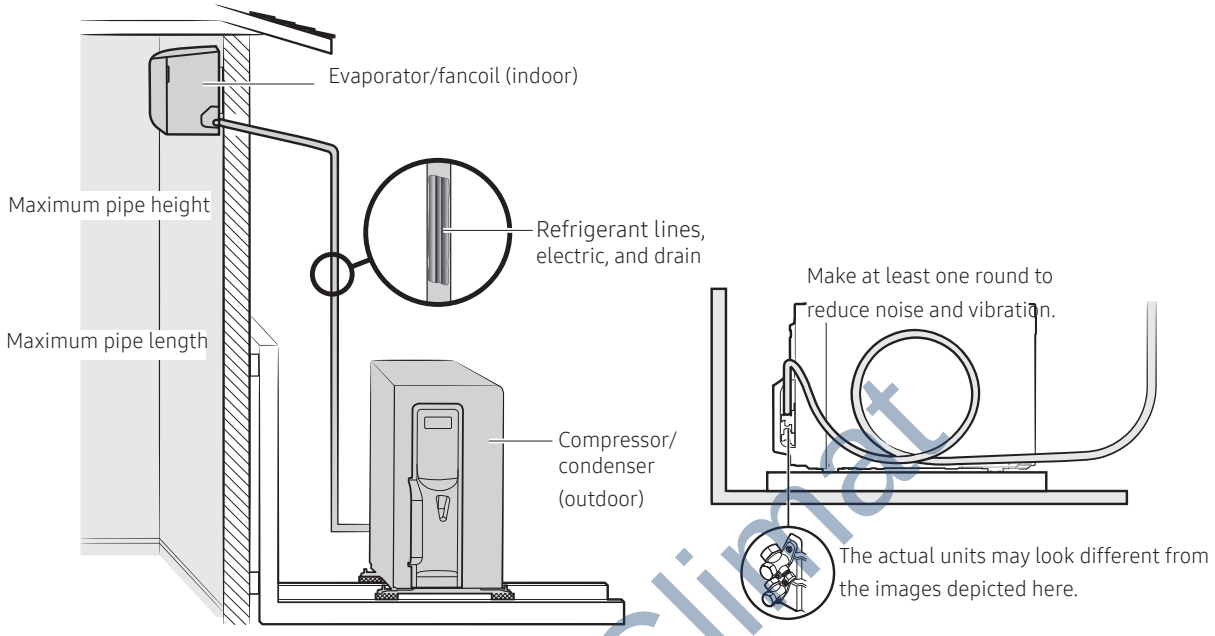
Wall-mounted type	
m (kg)	A (m²)
≤ 1.842	No requirement
1.843	4.45
1.9	4.58
2.0	4.83
2.2	5.31
2.4	5.79
2.6	6.39
2.8	7.41
3.0	8.51

  - m : Total refrigerant charge in the system
  - A : Minimum required floor area
- IMPORTANT: it's mandatory to consider either the table above or taking into consideration the local law regarding the minimum living space of the premises.
- Minimum installation height of indoor unit is 0.6 m for floor mounted, 1.8 m for wall, 2.2 m for ceiling.
- The actual refrigerant charge shall be in accordance with the room size within which the refrigerant containing parts are installed.
- Make sure that the fan and fan mechanism are operating adequately and the air intake and outlets are not obstructed.
- Marking to the equipment shall continue to be visible and legible. Markings and signs that are illegible shall be corrected.
- Refrigerating pipe or components shall be installed in a position where they are unlikely to be exposed to any substance which may corrode refrigerant containing components, unless the components are constructed of materials which are inherently resistant to corrosion or are suitably protected against this corrosive environment.

11. Installation

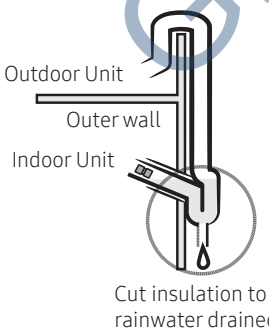
Viewing the typical installation

A typical installation will be similar to the one shown below.



(Unit : m)

Model	Pipe length			Pipe height
	Minimum	Maximum	Standard for factory charge	Maximum
AR60H**C1***	3	15	7.5	8
AR70H**C1*** AR50H**C1***	3	20	7.5	10



Make a U-trap (A) on the pipe (which is connected to the indoor unit) at outer wall and cut the bottom part of the insulation (about 10 mm) to prevent rainwater from getting inside through the insulation.

⚠ CAUTION

- For the product that uses the R-32 refrigerant, Install the indoor unit on the wall 1.8 m or higher from the floor.

11. Installation

Choosing the installation location

⚠ WARNING

- Verify that a dedicated circuit breaker and a disconnect switch of the appropriate sizes for the air conditioner are preinstalled and available for use.
- Verify that the voltage and frequency of the power supply comply with the rated voltage as defined on the unit name plate.
- Verify that a suitable grounding connection is available.
- Do not install this appliance in an environment containing hazardous substances or close to equipment that releases open flames.
- Do not install this appliance near a heater or flammable material.

⚠ CAUTION

- The manufacturer shall not be responsible for damage occurring as a result of the wrong voltage being applied to this air conditioner.
- The indoor and outdoor units must be installed in compliance with minimum clearances to ensure that both units are accessible from both sides and can be maintained or repaired. Insufficient clearance may reduce product performance, generate excessive noise, and reduce the life of some unit components.

IMPORTANT

- Any changes or modifications to the installation described in this manual that are not expressly approved by the manufacturer's warranty.

To determine where to locate the indoor and outdoor units, you must survey the entire site and consider many variables. The goal is to select locations that comply with all safety precautions while also minimizing the total effort involved.

11. Installation

Indoor unit location requirements

⚠ WARNING

- Do not install the unit in a humid, oily, or dusty location or in a location exposed to direct sunlight, water, or rain.
- Make sure that the wall can support the unit weight.

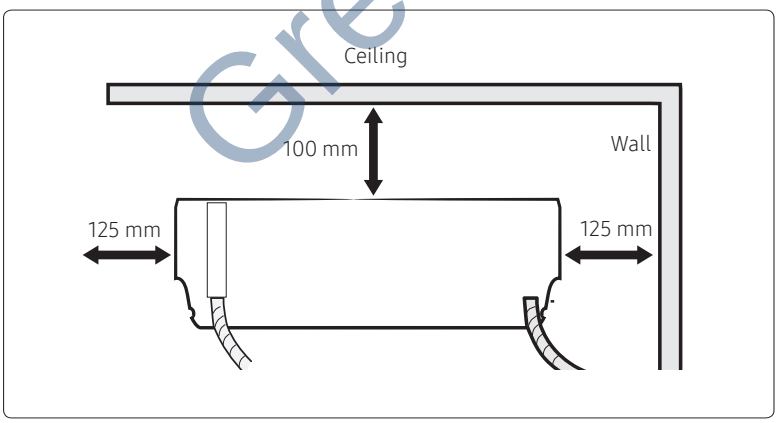
Examine the area that the customer wants to be air conditioned. Consider the following:

- What wall location will meet minimum clearances and provide optimal product performance?
- Will the wall provide adequate support for the unit weight (wall with stud construction or concrete)? If applicable, where are the studs?
- Where will you place the wall penetration for routing the piping bundle (consisting of power and communication cables, refrigerant pipes, and the drain hose) through the wall to the outdoor unit? Will the hole intersect any plumbing or wires in the wall?
- Will the condensate drain pipe run from the indoor unit to outside the home so that condensate water will naturally flow outside by gravity or will the drain pipe be connected to a condensate pump?

NOTE

- This manual covers a typical gravity-drain installation where the drain hose is routed to the outdoor unit through a hole in the wall.

Minimum clearances for the indoor unit



11. Installation

Outdoor unit location requirements

Examine the area where the outdoor unit could be located. Consider the following:

- What location will meet minimum clearances and provide optimal product performance?
- Is there an existing level and hard foundation, such as a concrete pad, that will support the unit weight and produce minimal vibration? Installation on uneven ground may result in abnormal vibrations, noise, or problems with the unit.
- Does the unit need to be mounted on the wall?
- Where are the dedicated circuit breaker and disconnect switch located? How will you connect them to the unit?
- How will you route the piping bundle from the indoor unit? Is the location as close as possible to where the indoor unit will be installed, to minimize the length of pipe and cables and at the same time ensure the required minimum piping length?
- Will the unit be sheltered from the wind? In a high-wind area, you may need to build a protective fence around the unit.
- Where will the condensate drain be installed?

⚠ WARNING

- The drain location must allow condensate to drain properly and prevent ice from forming on the unit in winter. If a block of ice falls from the unit, it may result in death, serious injury, or property damage. Improper or inadequate draining may result in water overflowing and property damage.

⚠ CAUTION

- Do not connect the drain hose to existing waste pipes as odors may arise.

Installation on an exterior wall

If the outdoor unit must be installed on an exterior wall, you will need an L-bracket to support the unit.
This bracket is not included with the unit.

⚠ WARNING

- The wall must be capable of supporting the weight of both the L-bracket and the outdoor unit. If the unit falls, it may result in crushing, electric shock, fire, or explosion that could cause death, severe personal injury, or property damage.

11. Installation

Installation Guide at the seashore

Make sure to follow below guides when installing at the seashore.

1 Do not install the product in a place where it is directly exposed to sea water and sea breeze.

- Make sure to install the product behind a structure (such as building) that can block see breeze.
- Even when it is inevitable to install the product in seashore, make sure that product is not directly exposed to sea breeze by installing a protection wall.

2 Consider that the salinity particles clinging to the external panels should be sufficiently washed out.

3 Because the residual water at the bottom of the outdoor unit significantly promotes corrosion, make sure that the unit is absolutely level so that the slope of the drain pan does not disturb drainage.

- Keep the floor level so that rain does not accumulate.
- Be careful that the drain hole will never be blocked.

4 When product is installed in seashore, periodically clean it with water to remove attached salinity.

5 Make sure to install the product in a place that provides smooth water drainage. Especially, ensure that the base part has good drainage.

6 If the product is damaged during the installation or maintenance, make sure to repair it.

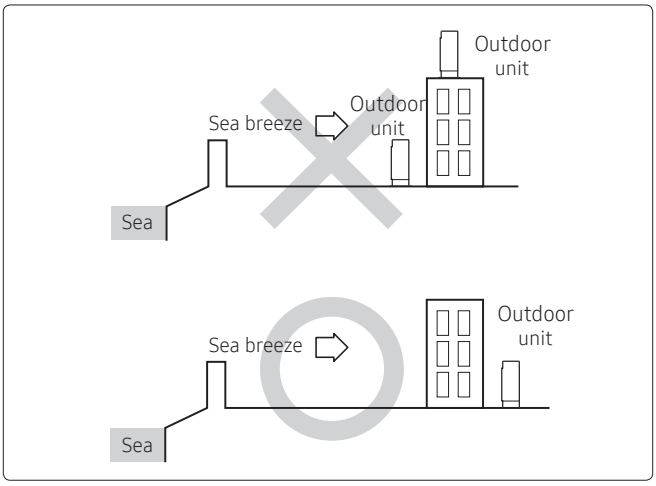
7 Check the condition of the product periodically.

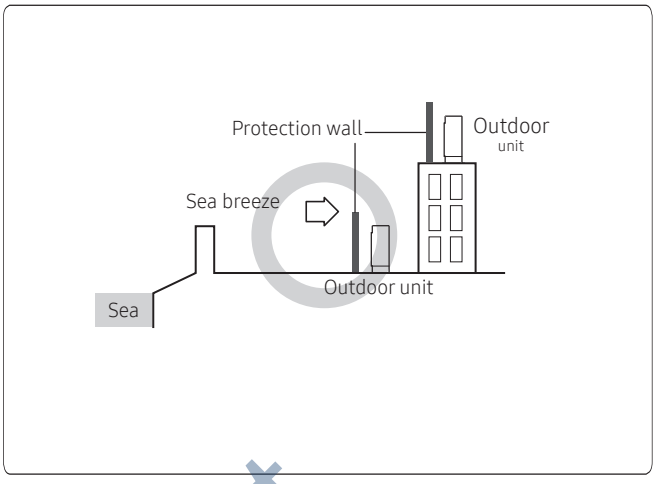
- Check the installation site every 3 months and perform anti-corrosion treatment such as commercial water repellent grease and wax, etc., based on the product condition.
- When the product is to be shut down for a long period of time, such as off-peak hours, take appropriate measures like covering the product.

8 If the product installed within 500m of seashore, special anti-corrosion treatment is required.

※ Please contact your local SAMSUNG representative for further details.

11. Installation



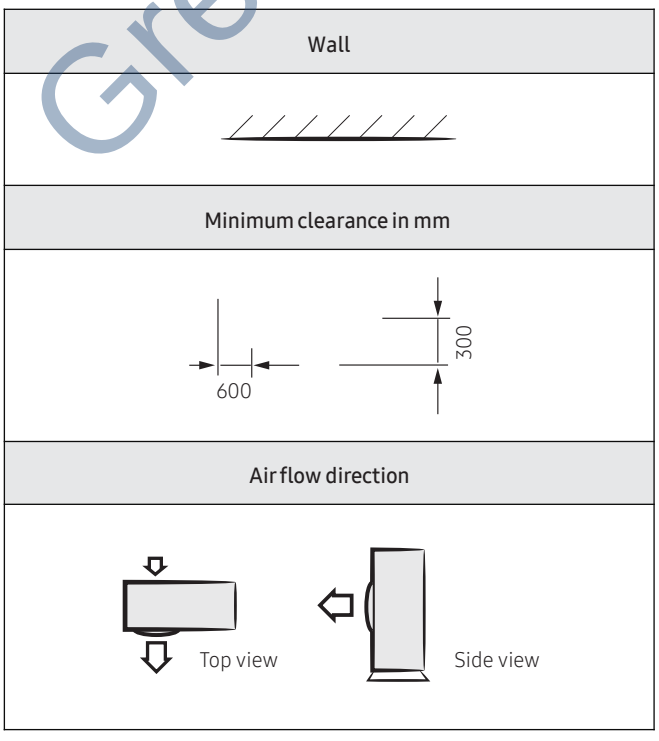


- Protection wall should be constructed with a solid material that can block the sea breeze and the height and width of the wall should be 1.5 times larger than the size of the outdoor unit. (You must secure more than 600 mm of space between the protection wall and the outdoor unit for air circulation.)

Minimum clearances for the outdoor unit

If there is an obstacle in front of the air vent, keep the outdoor unit at a distance of at least 700 mm from the obstacle.

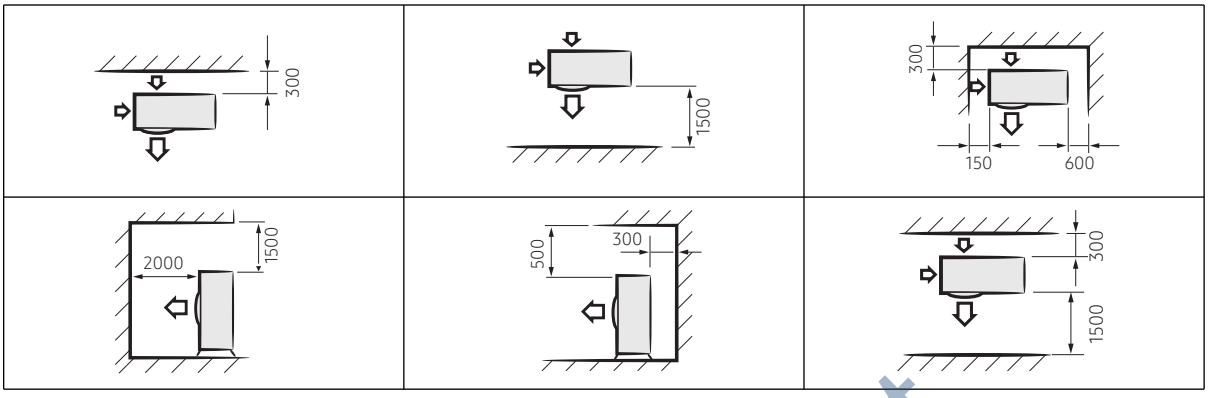
Legends:



11. Installation

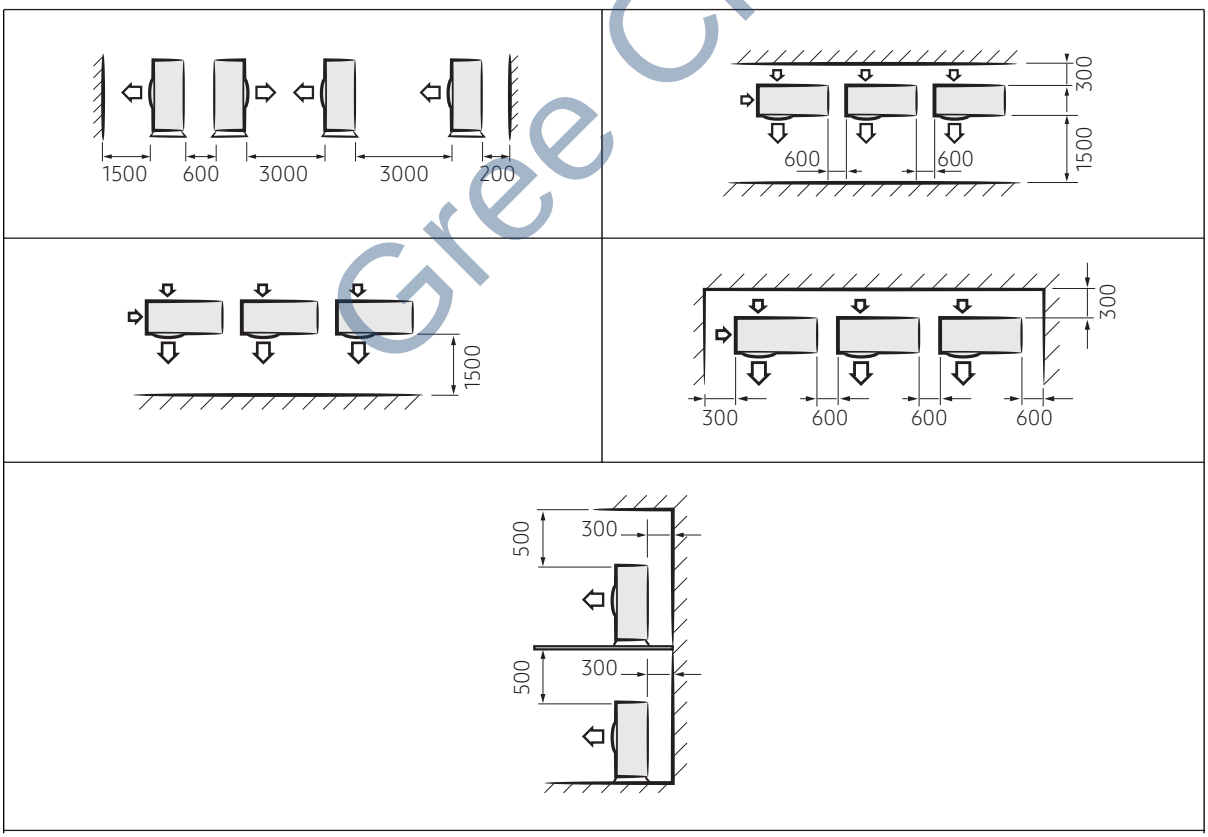
Examples for installing one outdoor unit:

Unit: mm



Examples for installing multiple outdoor units:

Unit: mm



11. Installation

Indoor Unit Installation

Attaching the mounting bracket to the wall

1 Hold the mounting bracket against the wall at the selected installation position making sure that the screw holes align with the center of the studs in the wall. If the screw locations do not align with the studs, use wall anchors.

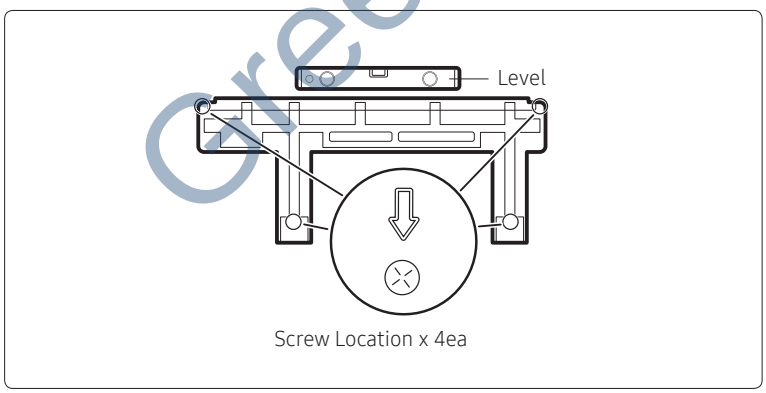
⚠ CAUTION

- The recommended best practice is to attach the mounting bracket directly to the studs in the wall. If you did not find a suitable location with studs, or if the wall is concrete, you must use wall anchors of a suitable type and weight capacity, and install them according to the manufacturer's instructions. Failure to do so may cause the material surrounding the joints to crumble over time and the screws to come loose from the wall. This may result in the unit falling from the wall, which could cause physical injury or equipment damage.

2 Using a level, make sure that the mounting bracket is level, then mark the location of the screw holes on the wall.

3 If using wall anchors, install them at the screw hole positions, following the manufacturer's instructions.

4 Using six field-supplied mounting screws and anchors (if applicable), attach the bracket to the wall.



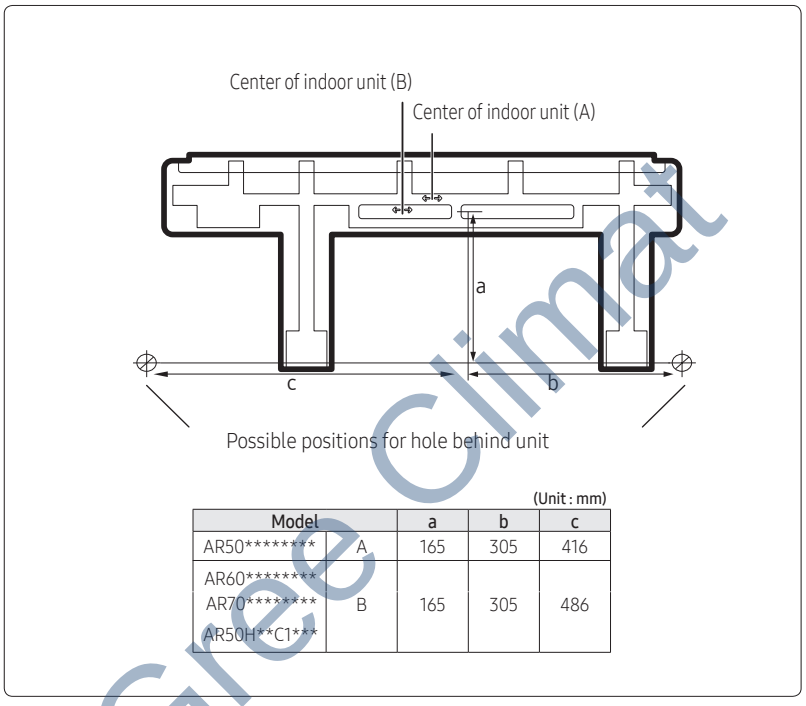
11. Installation

Indoor Unit Installation

Drilling the wall penetration

1 Determine the position of the hole through which the piping bundle (consisting of power and communication cables, refrigerant pipes, and the drain hose) will pass. Consider the following:

- The hole inner diameter must be 65 mm.
- The recommended hole location is behind the unit so that the hole and the piping bundle will not be visible in the room. The minimum distances between the hole and the mounting bracket are:



(Unit : mm)

Model		a	b	c
AR50********	A	165	305	416
AR60******** AR70******** AR50H**C1***	B	165	305	486

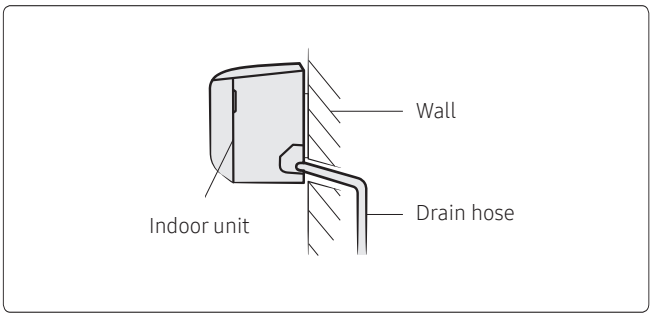
- If the hole cannot be positioned behind the unit, find a position as close to the unit as possible. The piping bundle that exits the unit and extends to the hole will need to be attached to the wall and will be visible inside the room.

- In relation to the bracket shown above, the unit is shipped with the drain hose connection on the right, the drain hose exits the unit on the left, and the refrigerant pipes are bent to exit on the left. Thus, positioning the hole to the left requires the least effort. If you position the hole to the right or below the unit, you will need to move the drain hose connection to the left and bend the pipes so that the hose and pipes exit to the right or bottom.

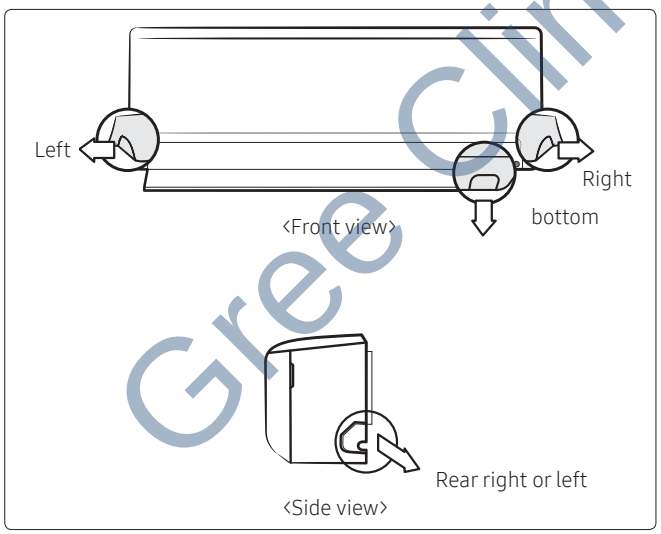
11. Installation

Indoor Unit Installation

2 Use a standard 65 mm hole saw to drill one hole at the selected location, at a 15° downward angle so that the drain hose will drain properly.



3 Based on the hole location, determine where the piping bundle (drain hose, refrigerant pipes, and cables) will exit the unit.



NOTE

- The left, right, or bottom exit will only be used if the hole is not positioned behind the unit.

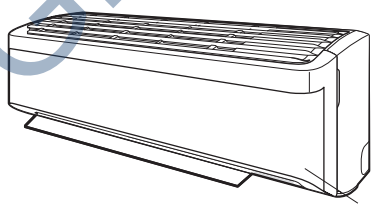
Connecting the power and communication cables

⚠ WARNING

- Do not modify the power cable in any way. Doing so may cause electric shock or fire due to poor connection, poor insulation, or current limit override. Make sure to comply with the technical standards of electrical installations and the wiring regulations in the local area.
- This appliance must be properly grounded. Do not ground the appliance to a gas pipe, plastic water pipe, or telephone line. Failure to comply may result in electric shock, fire, and explosion.
- Make sure that cabling is not subject to wear, corrosion, excessive pressure, vibration, sharp edges, or adverse environmental effects. Take into account the effects of aging or continual vibration from sources such as compressors or fans.

1 Connect each wire to its corresponding terminal number.

Power cable (Outdoor unit)	3G X 2.5 mm², H07RN-F
Outdoor-to-indoor power cable	3G X 1.0 mm², H07RN-F
Communication cable	2 X 0.75 mm², H05RN-F
Type GL	16A



Control box

Before connecting				
	Correct	Upside down	Damaged	Non-circular
After connecting				
	Correct (Front view)	Correct (Side view)	Upside down	Non-fitted

<Circular terminal>

⚠ CAUTION

- Connect the wires firmly so that wires cannot be pulledout. Loose wires can cause the connection to overheat. Each circular terminal must match the size of itscorresponding screw in the terminal block.

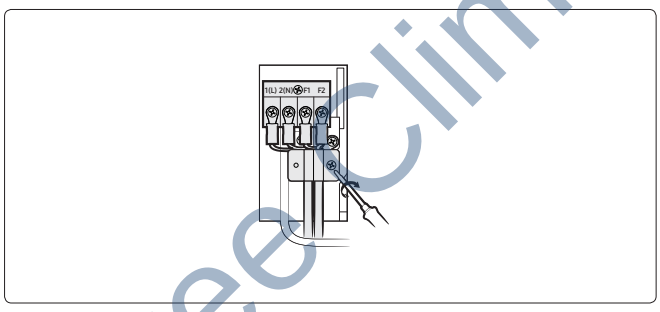
⚠ CAUTION

- For the terminal block wiring, use a wire with a ring terminal socket only. Regular wires without a ring terminal socket may become a hazard as the connections may loosen during operation.

For the product that uses the R-32 refrigerant, be cautious not to generate a spark by keeping the following requirements:

- Do not remove the fuses with power on.
- Do not disconnect the power plug from the wall outlet with power on.
- It is recommended to locate the outlet in a high position. Place the cords so that they are not tangled.

2 Tighten the terminal block screw.



3 You determined the exit position for the piping bundle. If using the left, right, or bottom exits, pass the cables through the selected knockout.

NOTE

- Power supply cords of parts of appliances for outdoor use shall not be lighter than polychloroprene sheathed flexible cord. (Code designation IEC: 60245 IEC66/CENELEC: H07RN-F, IEC: 60245 IEC57 CENELEC: H05RN-F, IEC: 60227 IEC53: H05VV-F)
- Power & Communication cable shall not exceed 30 m.

11. Installation

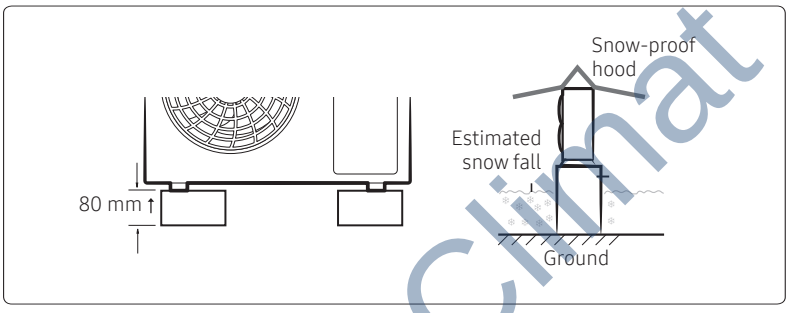
Outdoor Unit Installation

Mounting the outdoor unit

To promote proper condensate draining, the recommended installation of the outdoor unit is elevated above the ground on a mounting bracket attached to a concrete pad.

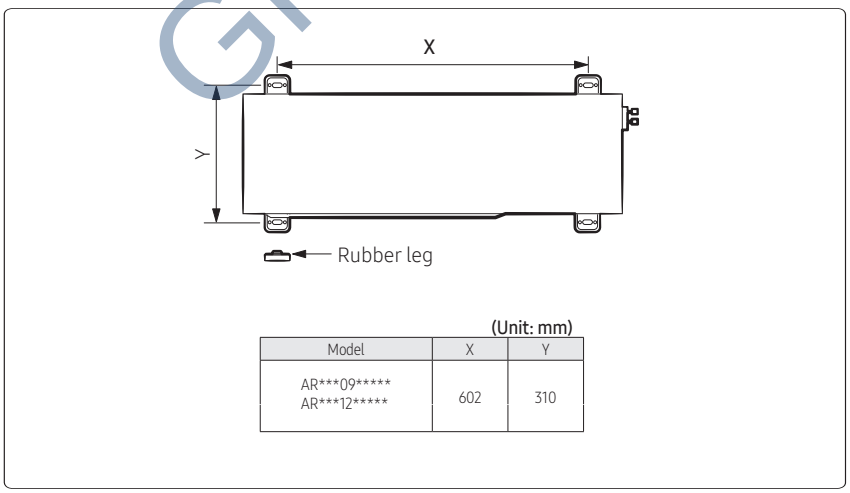
In areas where snowfall occurs, the unit must be mounted above the snow line to allow for proper heating. Snow cannot be allowed to collect on top of the unit. For promoting natural drainage in a heavy snow fall area:

- For promoting natural drainage in heavy snow fall area: Install the unit high enough of the ground to prevent the unit from being buried by snow. Depending on the estimated snow fall in the area there should be 80 mm or more of clearance. (Ensure that the drained water runs off correctly and safely.)
- Allow enough separation distance between the product and the ground.



On the ground

1 Place the outdoor unit in the selected installation location, ensuring proper clearances and with the arrow on top of the unit pointing away from the wall.
2 Clip the rubber feet to the tabs to minimize sound and vibration to the structure.



(Unit: mm)

Model	X	Y
AR***09***** AR***12*****	602	310

3 Level the unit, then use anchor bolts to secure it at the four mounting points.
4 For installations in locations that require seismic or hurricane tie downs, comply with local codes.
5 If the selected location is exposed to strong winds, install a protective fence around the unit so that the fan can operate correctly.

11. Installation

Outdoor Unit Installation

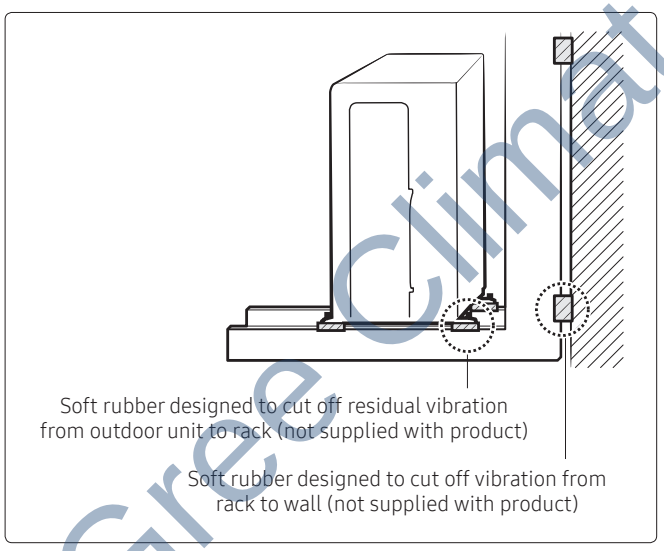
On a wall

⚠ WARNING

- The unit must be properly secured to the wall. If the unit falls, it may result in crushing, electric shock, fire, or explosion that could cause death, severe personal injury, or property damage.

1 At the selected installation location attach the L-bracket to the wall as follows:

- Install the bracket as close to the wall as possible.
- Insert rubber isolators between the bracket and the wall to minimize sound and vibration to the structure. Do not fully compress the isolators.



- Make sure that the bracket is level.
- Use suitable bolts/washers and lock washers.

2 Place the outdoor unit on the bracket, ensuring proper clearances and with the arrow on top of the unit pointing away from the wall.

3 Clip the rubber feet to the tabs to minimize sound and vibration to the structure.

4 Level the unit, then use anchor bolts to secure it at the four mounting points.

5 For installations in locations that require seismic or hurricane tie downs, comply with local codes.

11. Installation

Outdoor Unit Installation

Adding refrigerant (if needed)

The outdoor unit is charged with sufficient R-32 refrigerant to support up to a 7.5m line set. For lengths greater than 7.5m you must add 15 g of refrigerant per meter of additional length, after the lines are evacuated.

1 Calculated the additional refrigerant required;
Additional grams of R-32 = (Total line set meter -7.5m) * 15 g

2 Connect the common hose of the manifold gauge set to the inverted R-32 refrigerant cylinder.

3 Place the refrigerant cylinder on a scale set to measure grams.

4 Open the valve on the tank.

5 At the manifold connection, bleed the refrigerant to remove any air that may be present in the common hose.

6 Open the gauge manifold and charge the system with the amount of refrigerant calculated.

7 Close the gauge manifold valve, close the valve on the refrigerant tank, and remove the common hose.

Precautions on adding the R-32 refrigerant

In addition to the conventional charging procedure, the following requirements shall be kept.

- Make sure that contamination by other refrigerants does not occur for charging.
- To minimize the amount of refrigerant, keep the hoses and lines as short as possible.
- The cylinders shall be kept upright.
- Make sure that the refrigeration system is earthed before charging.
- Label the system after charging, if necessary.
- Extreme care is required not to overcharge the system.
- Before recharging, the pressure shall be checked with nitrogen blowing.
- After charging, check for leakage before commissioning.
- Be sure to check for leakage before leaving the work area.

Outdoor Unit Installation

Important information: regulation regarding the refrigerant used

This product contains fluorinated greenhouse gases. Do not vent gases into the atmosphere.

⚠ CAUTION

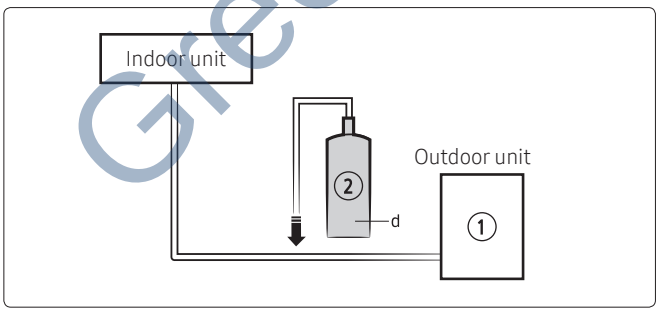
- Inform user if the system contains 5 tCO_2e or more of fluorinated greenhouse gases. In this case, it must be checked for leakage at least once every 12 months, according to regulation No. 517/2014. This activity must be covered by qualified personnel only. In the case of the situation above, the installer (or authorized person with responsibility for final check) must provide a maintenance book, with all the information recorded, according to REGULATION (EU) No. 517/2014 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 April 2014 on fluorinated greenhouse gases.

1 Please fill in the following with indelible ink on the refrigerant charge label supplied with this product and on this manual.

- ❶ the factory refrigerant charge of the product,
- ❷ the additional refrigerant amount charged in the field and
- ❶+❷ the total refrigerant charge. on the refrigerant charge label supplied with the product.

Refrigerant type	GWP value
R-32	675

- GWP: Global Warming Potential
- Calculating tCO_2e: kg x GWP/1000



Unit	Kg	tCO_2e
①, a		
②, b		
①+②, c		

11. Installation

Outdoor Unit Installation

NOTE

- Factory refrigerant charge of the product: see unit name plate
- Additional refrigerant amount charged in the field (Refer to the above information for the quantity of refrigerant replenishment.)
- Total refrigerant charge
- Refrigerant cylinder and manifold for charging

⚠ CAUTION

- The filled-out label must be adhered in the proximity of the product charging port (e.g. onto the inside of the stop valve cover).
- Make sure that the total refrigerant charge does not exceed (A), the maximum refrigerant charge, which is calculated in the following formula: Maximum refrigerant charge (A)= factory refrigerant charge (B) + maximum additional refrigerant charge due to piping extension (C)
- Here below, the summary table with refrigerant charge limits for each products.

(Unit:g)

Model name	gram		
	A	B	C
AR50*09***** AR50*12*****	1042.5	930	112.5
AR60*09***** AR60*12*****	1062.5	950	112.5
AR70*09***** AR70*12*****	1077.5	965	112.5
AR50H**C1***	1152.5	965	187.5

2025.12
Ver.2.3

Samsung Electronics Co., LTD.
Head Office (Suwon Korea) 129, Samsung-Ro, Yeongtong-Gu, Suwon City, Gyeonggi-Do, Korea 16677
Website : www.samsung.com, https://partnerhub.samsung.com Email : airconditioner@samsung.com